HCD-GSX75

SERVICE MANUAL

US Model
Canadian Model

Ver 1.2 2003.12

HCD-GSX75 is the Amplifier, CD player, Tape Deck and Tuner section in MHC-GSX75.

CD Section	Model Name Using Similar Mechanism	HCD-GS300AV
	CD Mechanism Type	CDM64C-K1BD47B
	Base Unit Name	BU-K1BD47B
	Optical Pick-up Name	KSM-213BFN
TAPE Section	Model Name Using Similar Mechanism	HCD-GS300AV
	Tape Transport Mechanism Type	CMAL1Z234A

SPECIFICATIONS

Main Unit
Amplifier section
For the U.S. model
AUDIO POWER SPECIFICATIONS
POWER OUTPUT AND TOTAL HARMONIC DISTORTION:
With 6-ohm loads, both channels driven, from 120 – 10,000 Hz; rated 150 watts per channel minimum RMS power, with no more than 10% total harmonic distortion from 250 milliwatts to rated output.

Continuous RMS power output (reference):
150 + 150 W
(6 ohms at 1 kHz, 10% THD)
Total harmonic distortion less than 0.09%
(6 ohms at 1 kHz, 70W)
Inputs
VIDEO (MD) IN (phono jacks):
voltage 250/450 mV, impedance 47 kilohms
AUDIO IN (phono jacks): 450 mV, impedance 47 kilohms
Outputs
VIDEO OUT (phono jacks):
max. output level 1Vp-p, unbalanced, Sync negative, load impedance 75 ohms
PHONES (stereo phone jack):
accepts headphones of 8 ohms or more
SPEAKER: accepts impedance of 6 to 16 ohms

CD player section

System	Compact disc and digital audio system
Laser	Semiconductor laser (CD: λ=780 nm) Emission duration: continuous
Frequency response	CD: 20 Hz – 20 kHz (±0.5 dB)
Wavelength	780 – 790 nm
Signal-to-noise ratio	More than 90 dB
Dynamic range	More than 90 dB

OPTICAL OUT (CD)
(Square optical connector jack, rear panel)

Wavelength	660 nm
Output level	–18 dBm

Tape deck section

Recording system	4-track 2-channel stereo
Frequency response	40 – 13,000 Hz (±3dB), using Sony TYPE I cassettes

— Continued on next page —

MiNi Hi-Fi COMPONENT SYSTEM

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SONY

Tuner section

FM stereo, FM/AM superheterodyne tuner

FM tuner section	
Tuning range	87.5 – 108.0 MHz
Antenna	FM lead antenna
Antenna terminals	75 ohms unbalanced
Intermediate frequency	10.7 MHz
AM tuner section	
Tuning range	530 – 1,710 kHz (with the tuning interval set at 10 kHz) 531 – 1,710 kHz (with the tuning interval set at 9 kHz)
Antenna	AM loop antenna, external antenna terminal
Intermediate frequency	450 kHz

General

Power requirements:	120 V AC, 60 Hz
Power consumption:	150 W
Dimensions (w/h/d) incl. projecting parts and controls	Amplifier/Tuner/ Tape/CD section: Approx. 280 x 326 x 490 mm
Mass:	Approx. 11.4 kg
Supplied accessories	Remote (1) size AA (R6) batteries (2) AM loop antenna (1) FM lead antenna (1)

Design and specifications are subject to change without notice.

TABLE OF CONTENTS

1. SERVICING NOTES 4

2. GENERAL 5

3. DISASSEMBLY 7
- 3-1. Top Cabinet 8
- 3-2. Front Cabi ASSY 8
- 3-3. Back Panel ASSY 9
- 3-4. Main Board 9
- 3-5. Amp Board 10
- 3-6. Power Board 10
- 3-7. Holder (LED-S), Middle (R), Power Bracket 11
- 3-8. CD Mechanism Deck (CDM64C-K1BD47B) 11
- 3-9. Base Unit (BU-K1BD47B), D-Sensor (OUT) Board, T-Sensor Board 12
- 3-10. D-Sensor (IN) Board, Load SW Board, LT Motor Board 12
- 3-11. CD LED Board 13
- 3-12. BU Holder ASSY 13
- 3-13. CD Board, Optical Pick-up (KSM-213BFN) 14
- 3-14. RX-Base PC Board ASSY, Mechanical Deck (CMAL1Z234A), Cassette Holder 14
- 3-15. Game Board, H/P Board 15
- 3-16. Display Board 15
- 3-17. KEY (2) Board, CD Sync Button 16
- 3-18. KEY Board, Wireless Board 16

4. TEST MODE 17

5. MECHANICAL ADJUSTMENTS 18

6. ELECTRICAL ADJUSTMENTS 18

7. DIAGRAMS
- 7-1. Circuit Boards Location 22
- 7-2. Block Diagrams 23
  - – CD Section – 23
  - – Tuner/Tape Deck Section – 24
  - – INPUT/EVR Section – 25
  - – Amp Section – 26
  - – Display/Power Supply Section – 27
- 7-3. Printed Wiring Board – CD Section – 28
- 7-4. Schematic Diagram – CD Section – 29
- 7-5. Printed Wiring Board – CD Motor/Sensor Section – 30
- 7-6. Schematic Diagram – CD Motor/Sensor Section – 31
- 7-7. Printed Wiring Board – Main Section – 32
- 7-8. Schematic Diagram – Main Section (1/3) – 33
- 7-9. Schematic Diagram – Main Section (2/3) – 34
- 7-10. Schematic Diagram – Main Section (3/3) – 35
- 7-11. Printed Wiring Board – Amp Section – 36
- 7-12. Schematic Diagram – Amp Section – 37
- 7-13. Printed Wiring Board – Display Section – 38
- 7-14. Schematic Diagram – Display Section – 39
- 7-15. Printed Wiring Board – Key Section – 40
- 7-16. Schematic Diagram – Key Section – 41
- 7-17. Printed Wiring Board – Power Section – 42
- 7-18. Schematic Diagram – Power Section – 43
- 7-19. IC Block Diagrams 44
- 7-20. IC Pin Function Description 46

8. EXPLODED VIEWS
- 8-1. General Section 51
- 8-2. Front Panel Section 52
- 8-3. Chassis Section 53
- 8-4. Mechanism Deck Section-1 (CDM64C-K1BD47B) 54
- 8-5. Mechanism Deck Section-2 (CDM64C-K1BD47B) 55
- 8-6. Base Unit Section (BU-K1BD47B) 56

9. ELECTRICAL PARTS LIST 57

Notes on chip component replacement

- Never reuse a disconnected chip component.
- Notice that the minus side of a tantalum capacitor may be damaged by heat.

Flexible Circuit Board Repairing

- Keep the temperature of the soldering iron around 270 °C during repairing.
- Do not touch the soldering iron on the same conductor of the circuit board (within 3 times).
- Be careful not to apply force on the conductor when soldering or unsoldering.

SAFETY CHECK-OUT

After correcting the original service problem, perform the following safety check before releasing the set to the customer:
Check the antenna terminals, metal trim, "metallized" knobs, screws, and all other exposed metal parts for AC leakage.
Check leakage as described below.

LEAKAGE TEST

The AC leakage from any exposed metal part to earth ground and from all exposed metal parts to any exposed metal part having a return to chassis, must not exceed 0.5 mA (500 microamperes.). Leakage current can be measured by any one of three methods.

1. A commercial leakage tester, such as the Simpson 229 or RCA WT-540A. Follow the manufacturers' instructions to use these instruments.
2. A battery-operated AC milliammeter. The Data Precision 245 digital multimeter is suitable for this job.
3. Measuring the voltage drop across a resistor by means of a VOM or battery-operated AC voltmeter. The "limit" indication is 0.75 V, so analog meters must have an accurate low-voltage scale. The Simpson 250 and Sanwa SH-63Trd are examples of a passive VOM that is suitable. Nearly all battery operated digital multimeters that have a 2 V AC range are suitable. (See Fig. A)

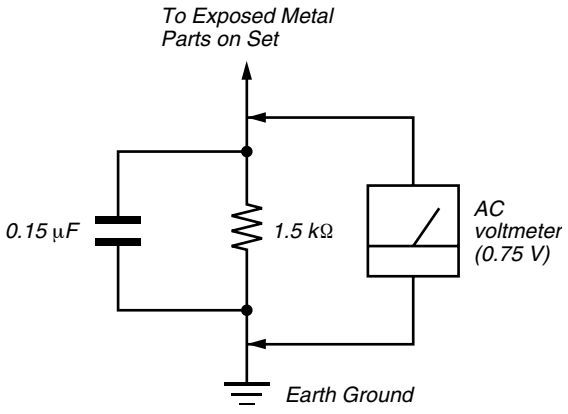


Fig. A. Using an AC voltmeter to check AC leakage.

CAUTION
Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

NOTES ON HANDLING THE OPTICAL PICK-UP BLOCK OR BASE UNIT

The laser diode in the optical pick-up block may suffer electrostatic break-down because of the potential difference generated by the charged electrostatic load, etc. on clothing and the human body.
During repair, pay attention to electrostatic break-down and also use the procedure in the printed matter which is included in the repair parts.
The flexible board is easily damaged and should be handled with care.

NOTES ON LASER DIODE EMISSION CHECK

The laser beam on this model is concentrated so as to be focused on the disc reflective surface by the objective lens in the optical pick-up block. Therefore, when checking the laser diode emission, observe from more than 30 cm away from the objective lens.

LASER DIODE AND FOCUS SEARCH OPERATION CHECK

Carry out the "S curve check" in "CD section adjustment" and check that the S curve waveforms is output three times.

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK ⚠ OR DOTTED LINE WITH MARK ⚠ ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

ATTENTION AU COMPOSANT AYANT RAPPORT À LA SÉCURITÉ!

LES COMPOSANTS IDENTIFÉS PAR UNE MARQUE ⚠ SUR LES DIAGRAMMES SCHÉMATIQUES ET LA LISTE DES PIÈCES SONT CRITIQUES POUR LA SÉCURITÉ DE FONCTIONNEMENT. NE REMPLACER CES COMPOSANTS QUE PAR DES PIÈSES SONY DONT LES NUMÉROS SONT DONNÉS DANS CE MANUEL OU DANS LES SUPPÉMENTS PUBLIÉS PAR SONY.

SECTION 1
SERVICING NOTES

CD-TEXT TEST DISC

This unit is able to display the test data (character information) written in the CD on its fluorescent indicator tube.
The CD-TEXT TEST DISC (TGCS-313: J-2501-126-A) is used for checking the display.
To check, perform the following procedure.

Checking Method:

1. Press the I/⏻ button to turn the power on, set the disc to the disc table with the "test disc" label facing right, and chuck the disc.
2. Press the CD button to set CD function, and press the ◀▶ button to playback the disc.
3. The following will be displayed on the liquid crystal display.
   Display : 1KHZ/0dB/L R
4. Pressing the −I◀◀ or ▶▶I+ button, select the track. The text data of each track will be displayed.
   For details of the displayed contents for each track, refer to "Table 1: CD-TEXT TEST DISC TEXT Data Contents".

Restrictions in CD-TEXT Display

In this unit, some special characters will not be displayed properly. These will be displayed as a space or a character resembling it.

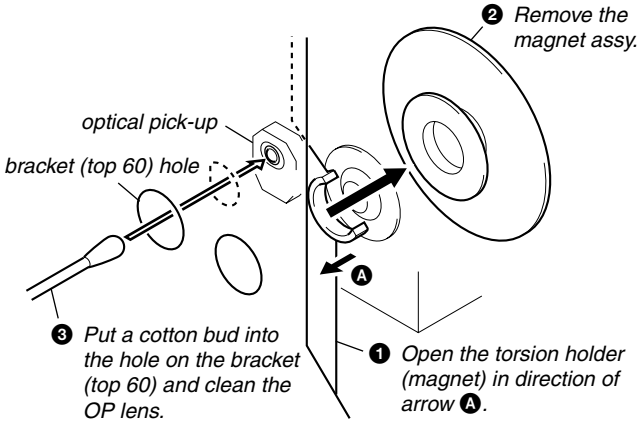
Table 1: CD-TEXT TEST DISC TEXT Data Contents (TRACKS No. 1 to 20: Normal Characters)

TRACK No.	Displayed Contents
1	1kHz/0dB/L&R
2	20Hz/0dB/L&R
3	40Hz/0dB/L&R
4	100Hz/0dB/L&R
5	200Hz/0dB/L&R
6	500Hz/0dB/L&R
7	1kHz/0dB/L&R
8	5kHz/0dB/L&R
9	7kHz/0dB/L&R
10	10kHz/0dB/L&R
11	16kHz/0dB/L&R
12	18kHz/0dB/L&R
13	20kHz/0dB/L&R
14	1kHz/0dB/L&R
15	1kHz/–1dB/L&R
16	1kHz/–3dB/L&R
17	1kHz/–6dB/L&R
18	1kHz/–10dB/L&R
19	1kHz/–20dB/L&R
20	1kHz/–60dB/L&R

Note: Track No. 21 to 99 are not displayed.

CLEANING OBJECTIVE LENS OF OPTICAL PICK-UP

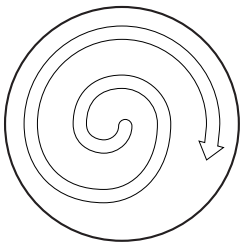
• In cleaning the objective lens of optical pick-up, be sure the following below.


❷ Remove the magnet assy.
optical pick-up
bracket (top 60) hole
Ⓐ
❸ Put a cotton bud into the hole on the bracket (top 60) and clean the OP lens.
❶ Open the torsion holder (magnet) in direction of arrow Ⓐ.

Note 1. In cleaning the lens, do not apply an excessive force.
As the optical pick-up is vulnerable, application of excessive force could damage the lens holder.

Note 2. In cleaning, do not use a cleaner other than exclusive cleaning liquid (KK-91 or isopropyl alcohol).

Note 3. Wipe the objective lens spirally from center toward outside. (See Figure A)



(Figure A)

SECTION 2
GENERAL

This section is extracted from instruction manual.

MAIN UNIT

ALPHABETICAL ORDER

A – H

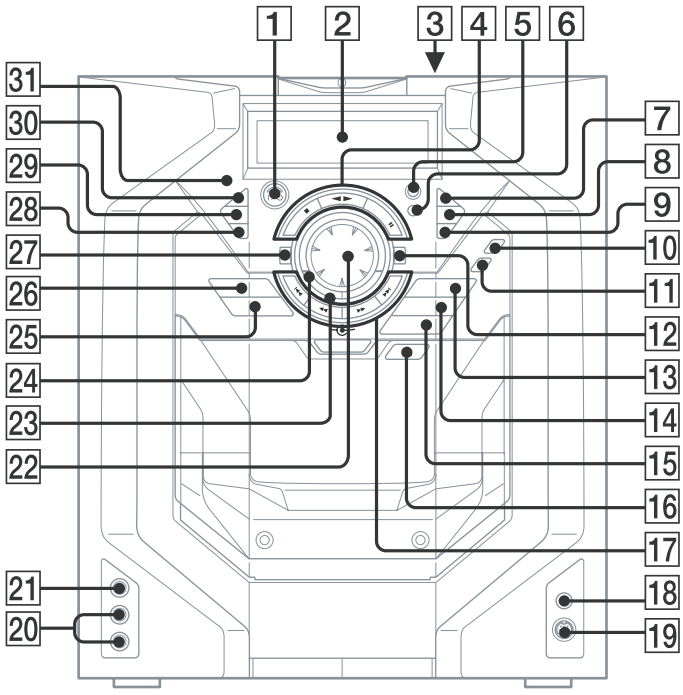
ALBM + 12
ALBM – 27
AUDIO IN jack 20
CD 26
CD SYNC 10
CLEAR 28
DISC SELECT 22
DISPLAY 7
Display window 2
ENTER 29
FM MODE/REPEAT 9
GAME 15
GAME MIXING 11

I – Z

ILLUMINATION 6
KEYBOARD INPUT jack 19
MENU 30
PHONES jack 18
PLAY MODE/DIRECTION 8
POWER ILLUMINATOR 23
Remote sensor 31
TAPE 13
Tape deck 3
TUNER/BAND 25
VIDEO (MD) 14
VIDEO IN jack 21
VOLUME 24

BUTTON DESCRIPTIONS

I/⏻ (power) 1
⏏ PUSH (tape deck) 3
◄► (play) 4
II (pause) 4
■ (stop) 4
REC PAUSE/START 5
⏏ PUSH (front cover) 16
◄◄ (rewind) 17
►► (fast forward) 17
I◄◄ (go back) 17
►►I (go forward) 17



This section is extracted from instruction manual.

REMOTE CONTROL

ALPHABETICAL ORDER

A – Q

ALBM +/– 14 21
CD 29
CLEAR 10
CLOCK/TIMER SELECT 2
CLOCK/TIMER SET 3
DISC +/– 15 20
DISPLAY 11
ENTER 25
GAME wj
GAME MIXING 9
GROOVE 17
MENU 26
PLAY MODE 6
PRESET +/– 12 23
PRESET EQ 16

R – Z

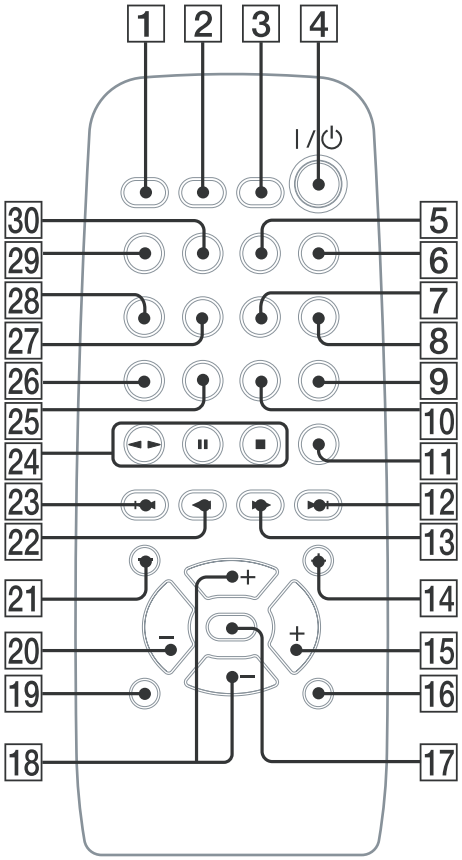
REPEAT 8
SLEEP 1
SURROUND 19
TAPE 5
TUNER/BAND 30
TUNING +/– 13 22
VIDEO (MD) 28
VOL +/– 18
WIRELESS 7

BUTTON DESCRIPTIONS

I/⏻ (power) 4
◄► (play) 24
II (pause) 24
■ (stop) 24
I◄◄ (go back) 23
◄◄ (rewind) 22
►► (fast forward) 13
►►I (go forward) 12

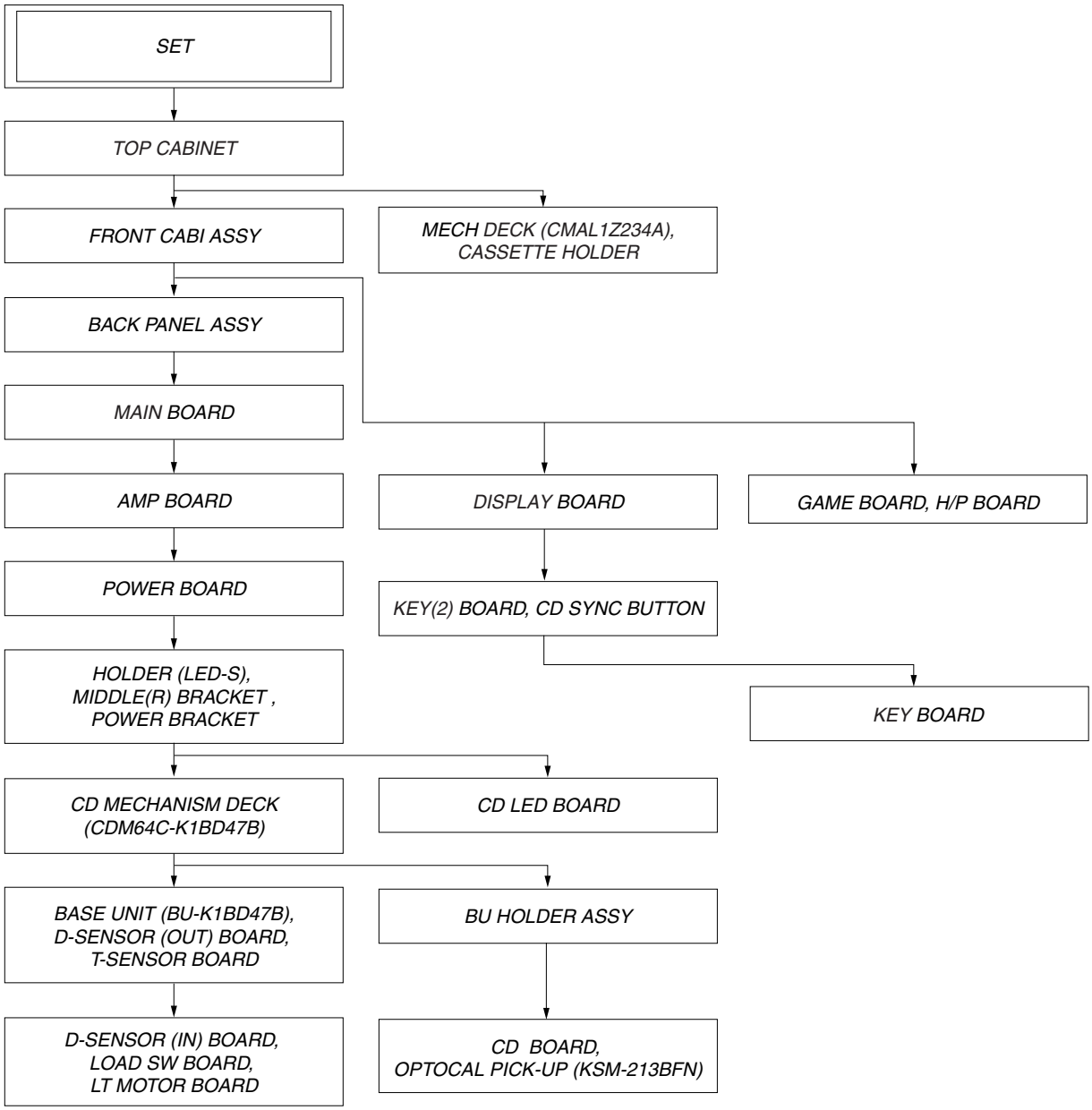
NOTES FOR THE SUPPLIED REMOTE

* The WIRELESS button is not available for MHC-GSX75.



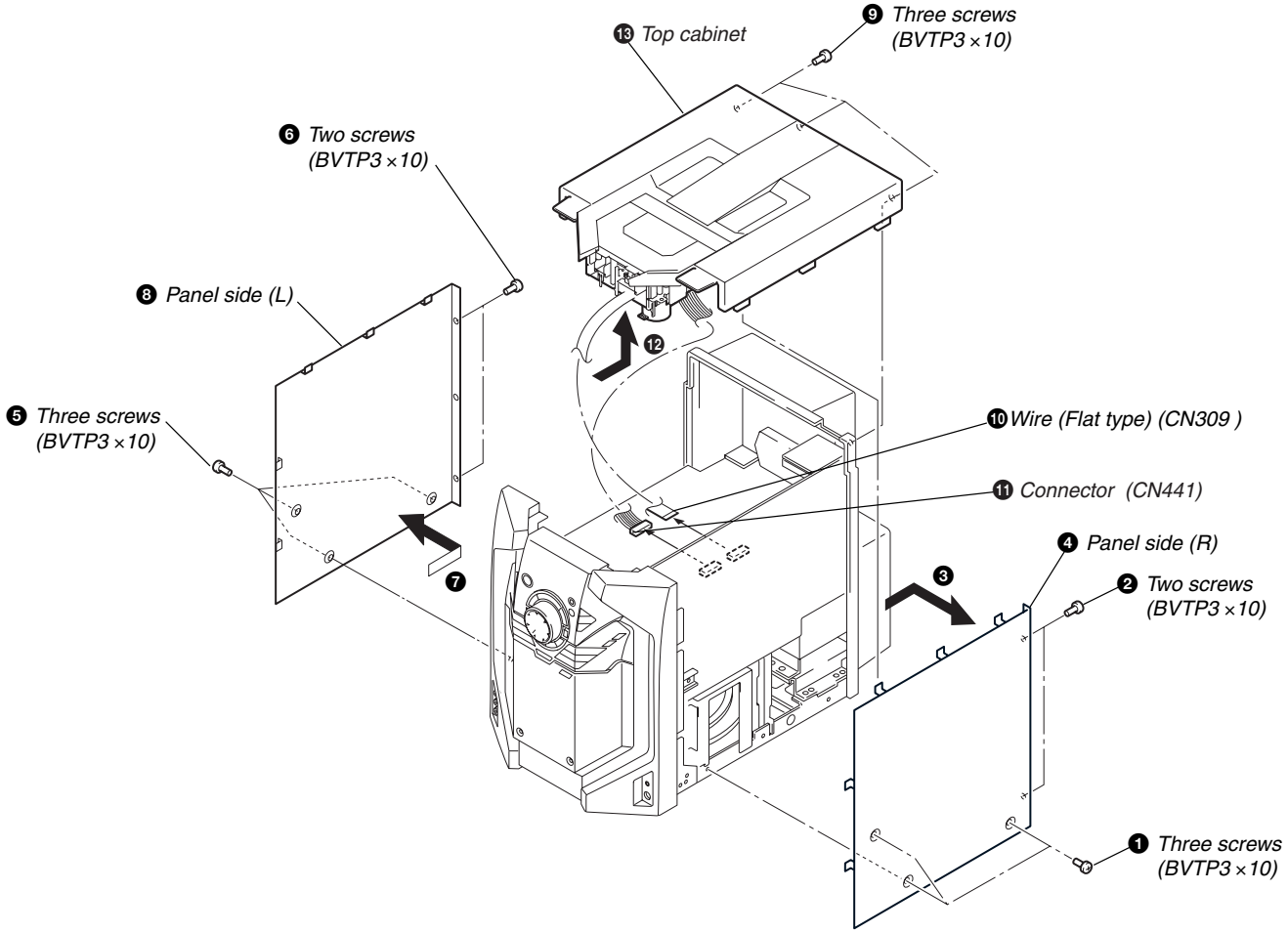
SECTION 3
DISASSEMBLY

- This set can be disassembled in the order shown below.

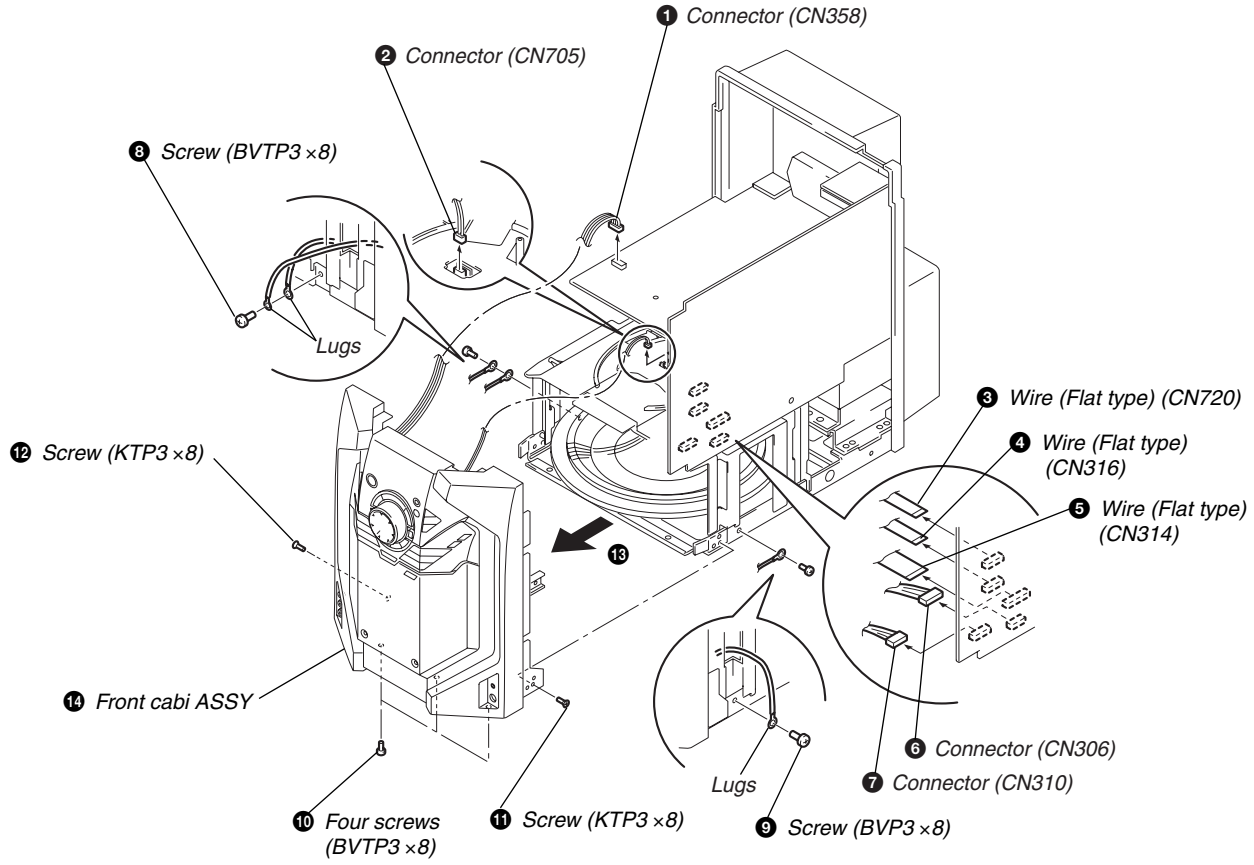


Note: Follow the disassembly procedure in the numerical order given.

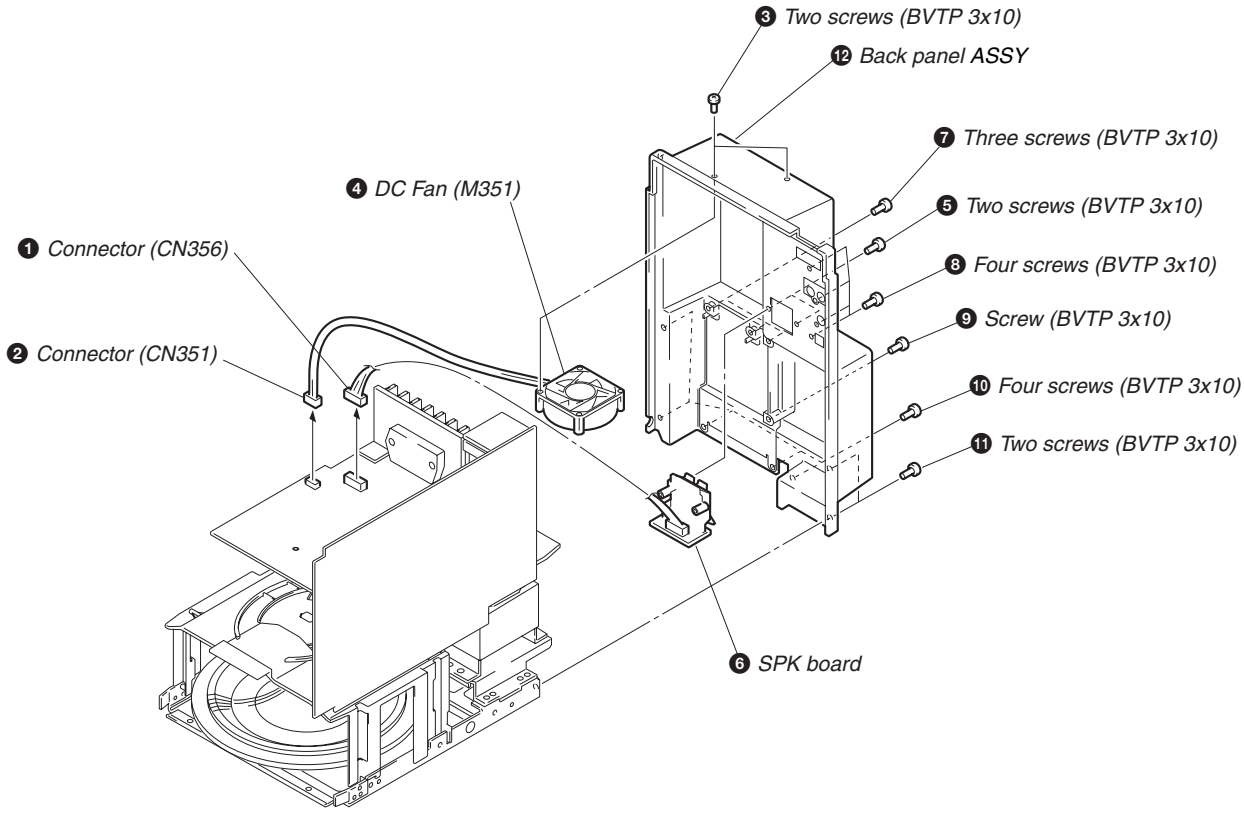
3-1. TOP CABINET



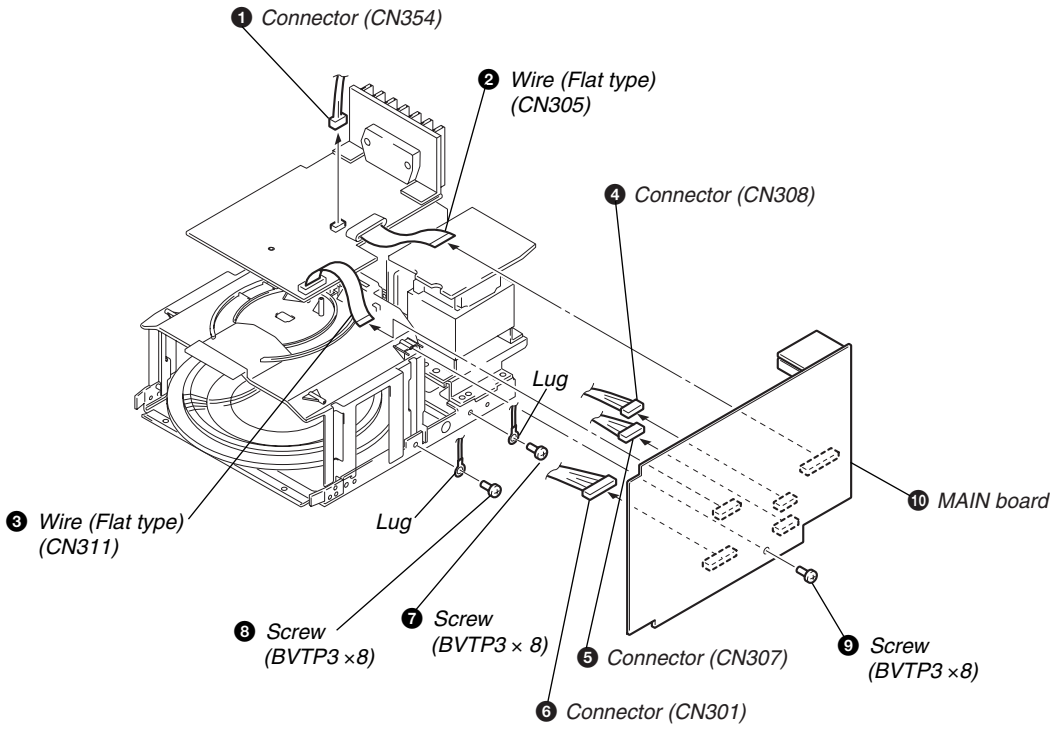
3-2. FRONT CABI ASSY



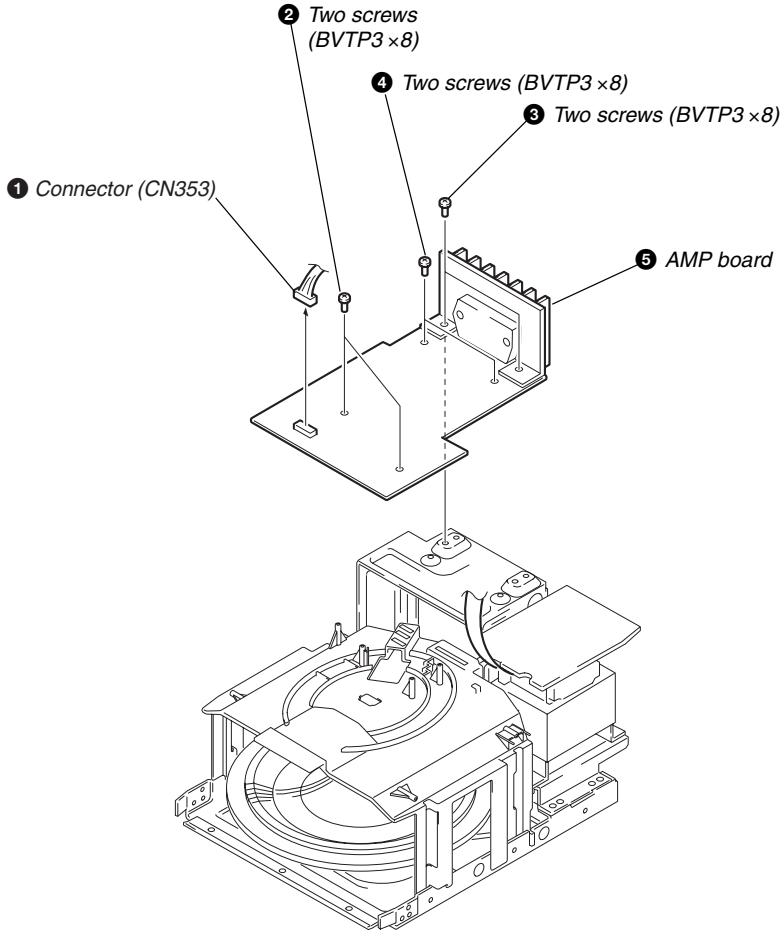
3-3. BACK PANEL ASSY


❸ Two screws (BVTP 3x10)
⓬ Back panel ASSY
❼ Three screws (BVTP 3x10)
❹ DC Fan (M351)
❺ Two screws (BVTP 3x10)
❶ Connector (CN356)
❽ Four screws (BVTP 3x10)
❷ Connector (CN351)
❾ Screw (BVTP 3x10)
❿ Four screws (BVTP 3x10)
⓫ Two screws (BVTP 3x10)
❻ SPK board

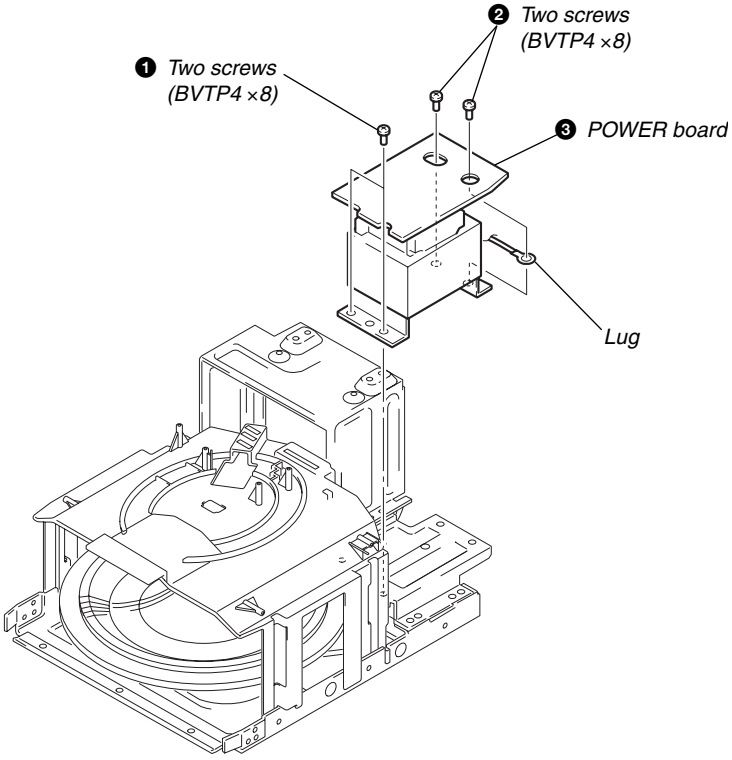
3-4. MAIN BOARD



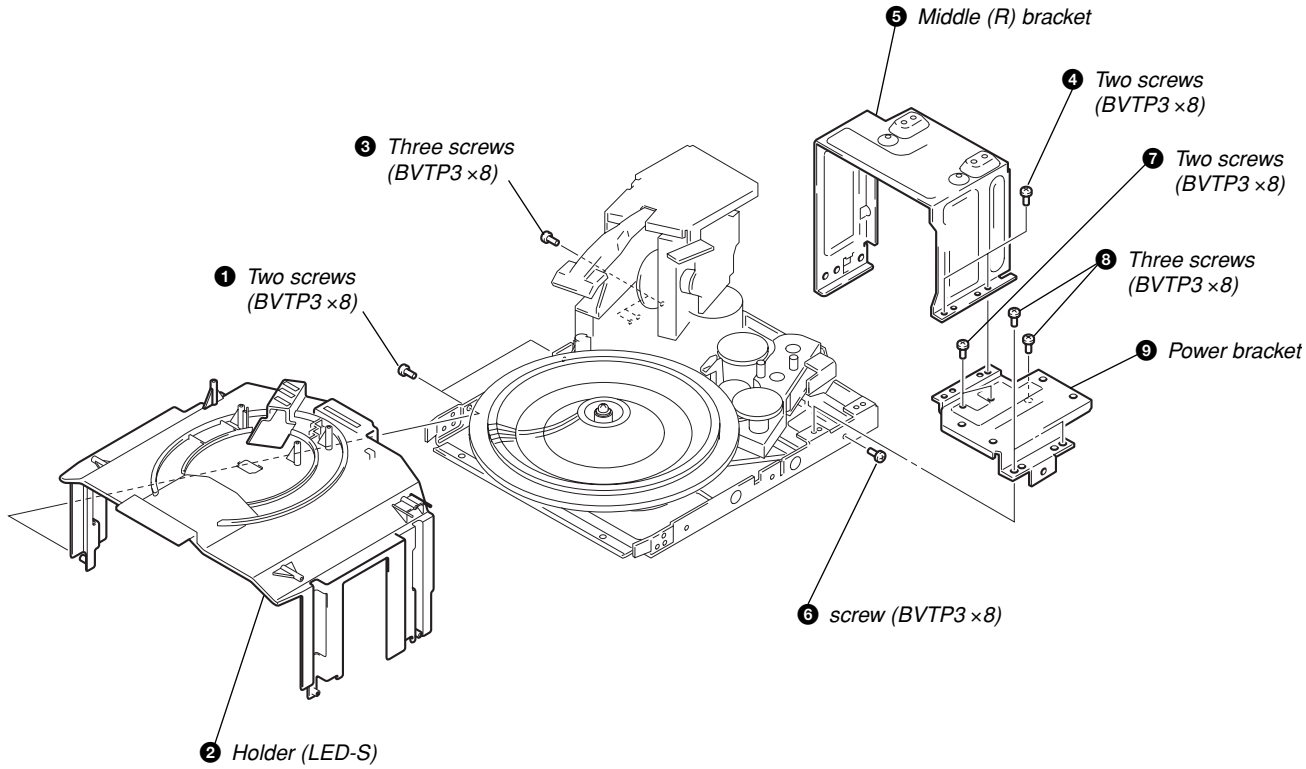
3-5. AMP BOARD



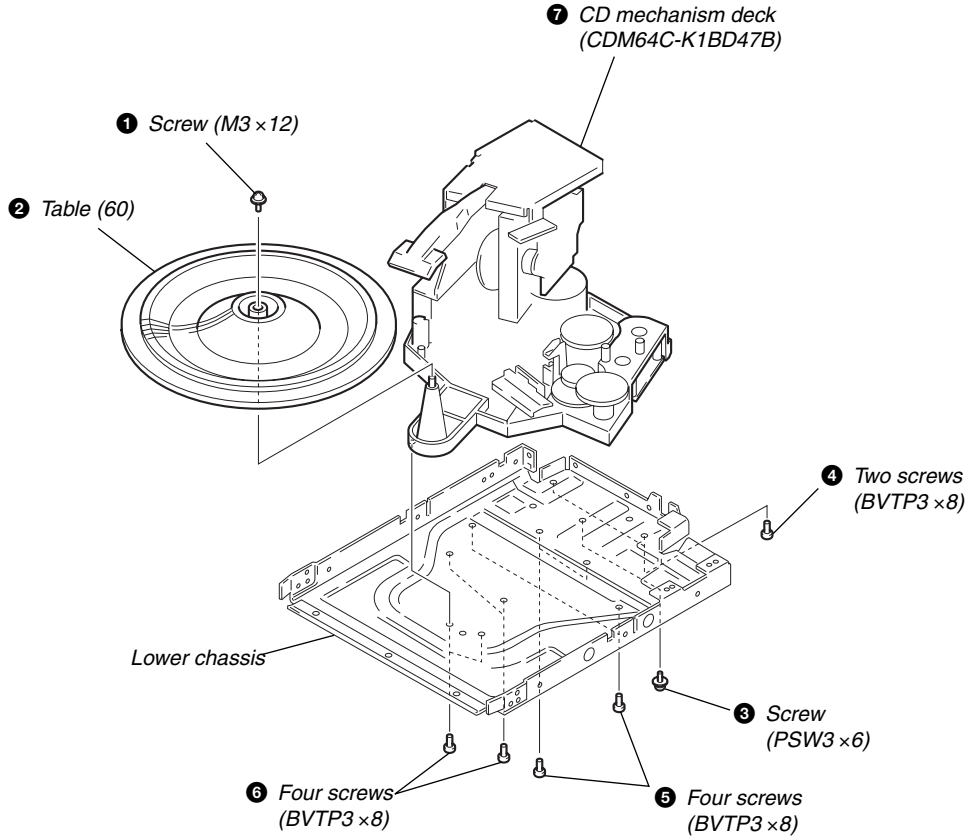
3-6. POWER BOARD



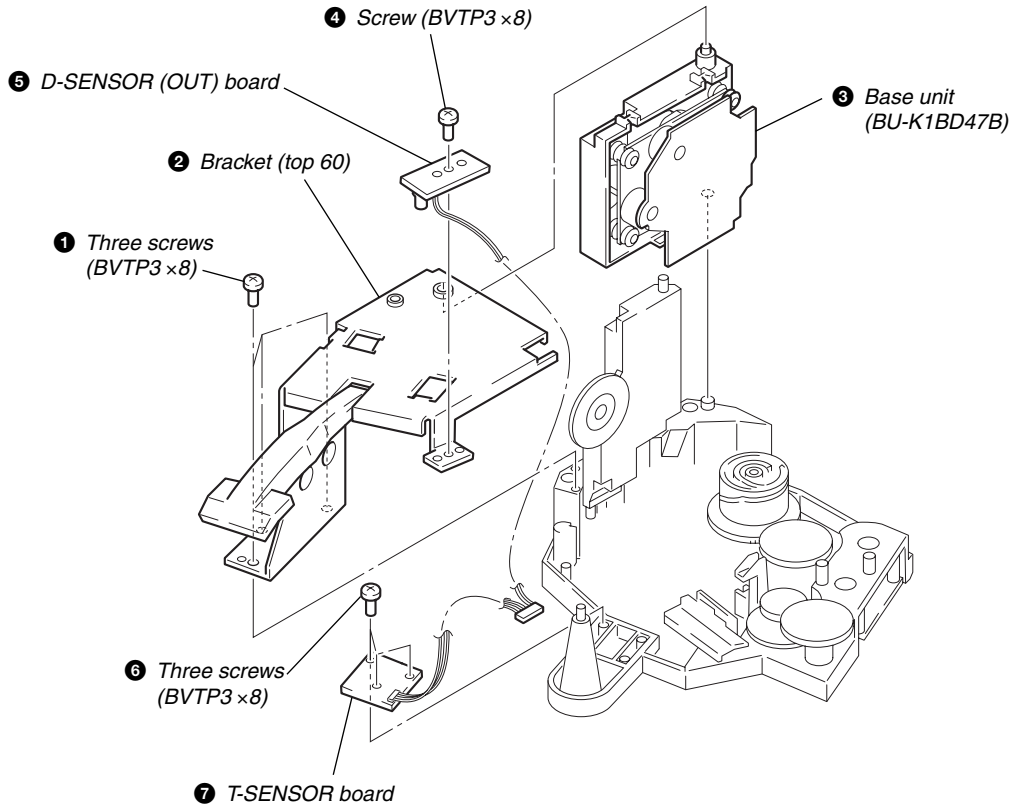
3-7. HOLDER (LED-S), MIDDLE (R) BRACKET, POWER BRACKET


❺ Middle (R) bracket
❹ Two screws (BVTP3 ×8)
❸ Three screws (BVTP3 ×8)
❼ Two screws (BVTP3 ×8)
❶ Two screws (BVTP3 ×8)
❽ Three screws (BVTP3 ×8)
❾ Power bracket
❻ screw (BVTP3 ×8)
❷ Holder (LED-S)

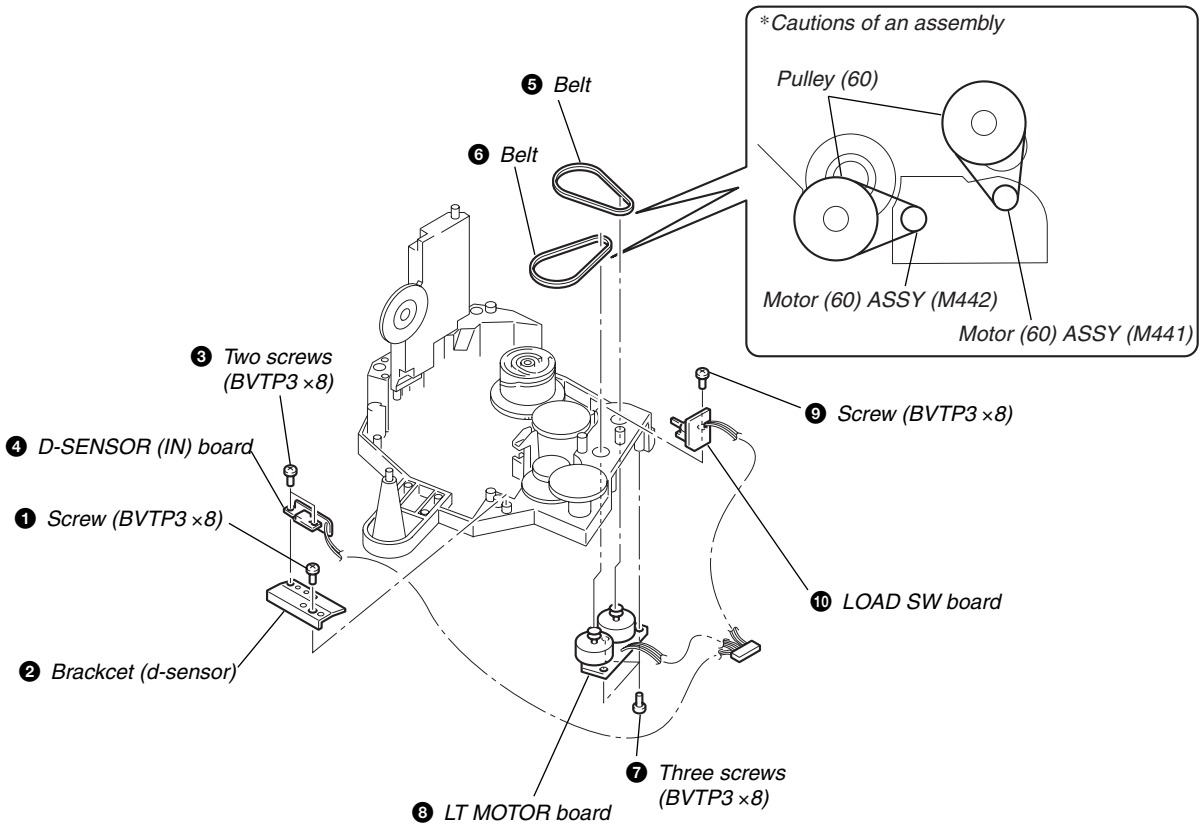
3-8. CD MECHANISM DECK (CDM64C-K1BD47B)


❼ CD mechanism deck (CDM64C-K1BD47B)
❶ Screw (M3 ×12)
❷ Table (60)
❹ Two screws (BVTP3 ×8)
Lower chassis
❸ Screw (PSW3 ×6)
❻ Four screws (BVTP3 ×8)
❺ Four screws (BVTP3 ×8)

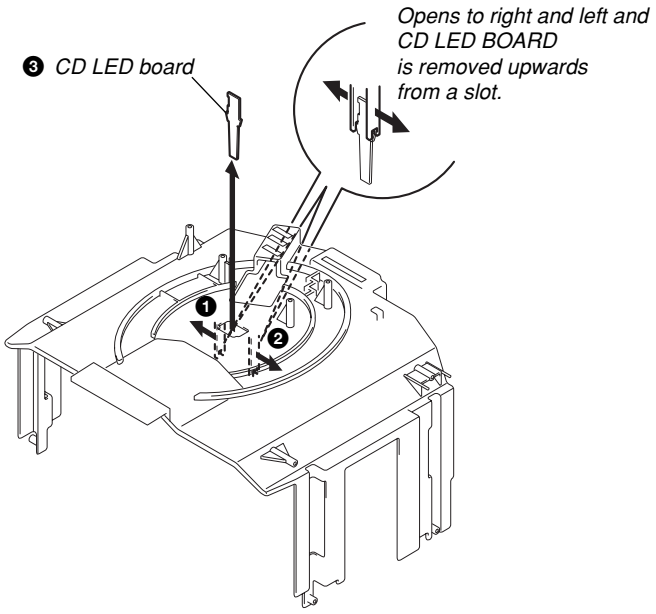
3-9. BASE UNIT (BU-K1BD47B), D-SENSOR (OUT) BOARD, T-SENSOR BOARD


❹ Screw (BVTP3 ×8)
❺ D-SENSOR (OUT) board
❸ Base unit (BU-K1BD47B)
❷ Bracket (top 60)
❶ Three screws (BVTP3 ×8)
❻ Three screws (BVTP3 ×8)
❼ T-SENSOR board

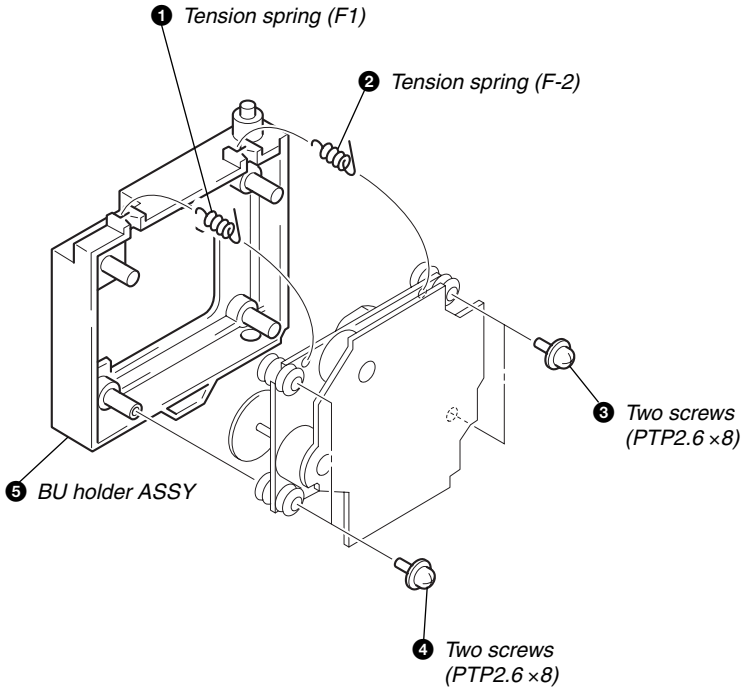
3-10. D-SENSOR (IN) BOARD, LOAD SW BOARD, LT MOTOR BOARD



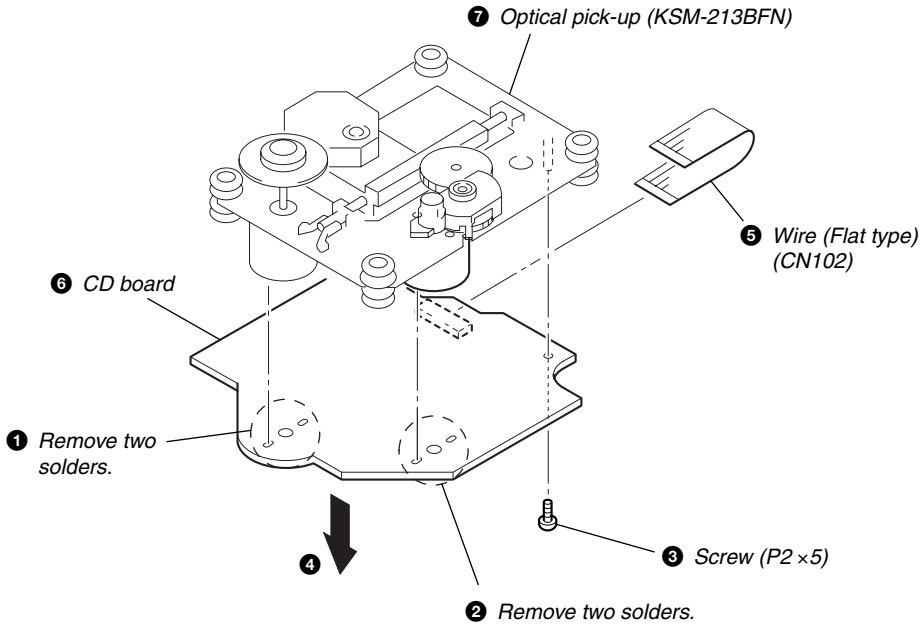
3-11. CD LED BOARD



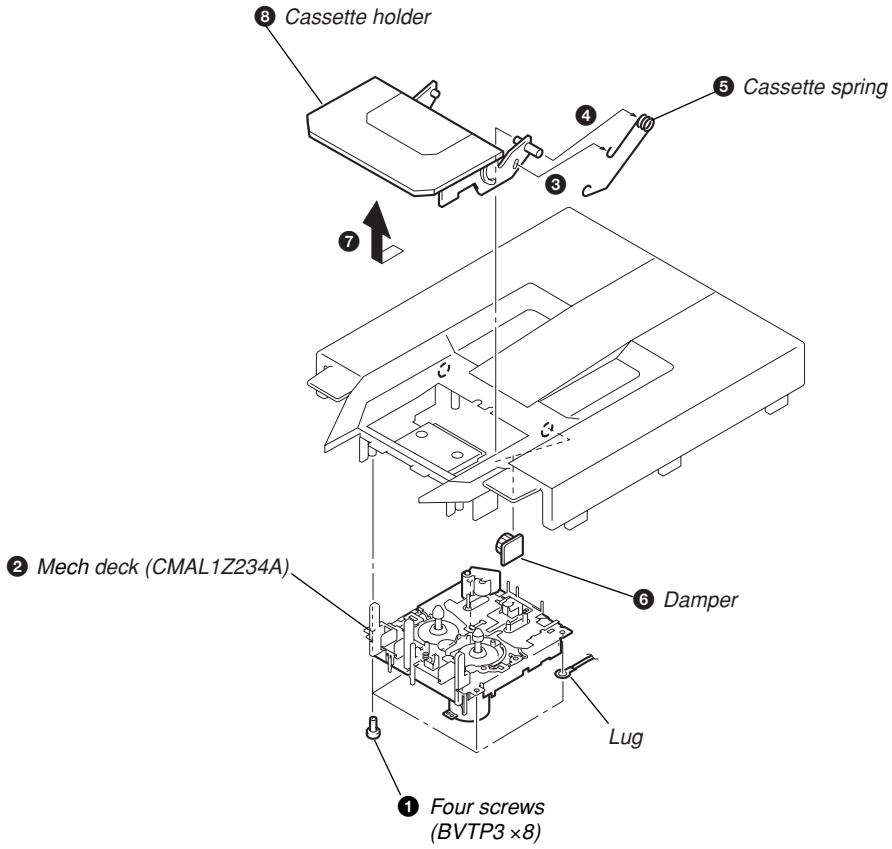
3-12. BU HOLDER ASSY



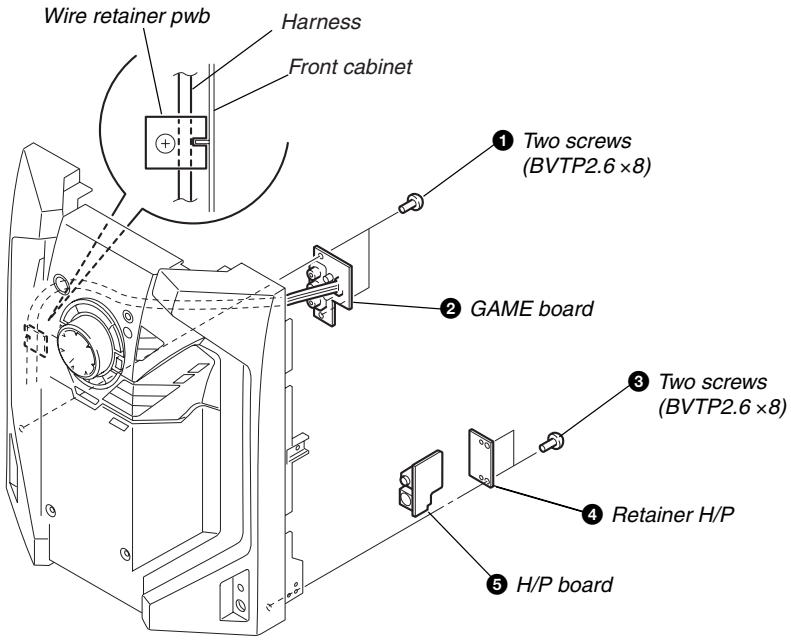
3-13. CD BOARD, OPTICAL PICK-UP (KSM-213BFN)



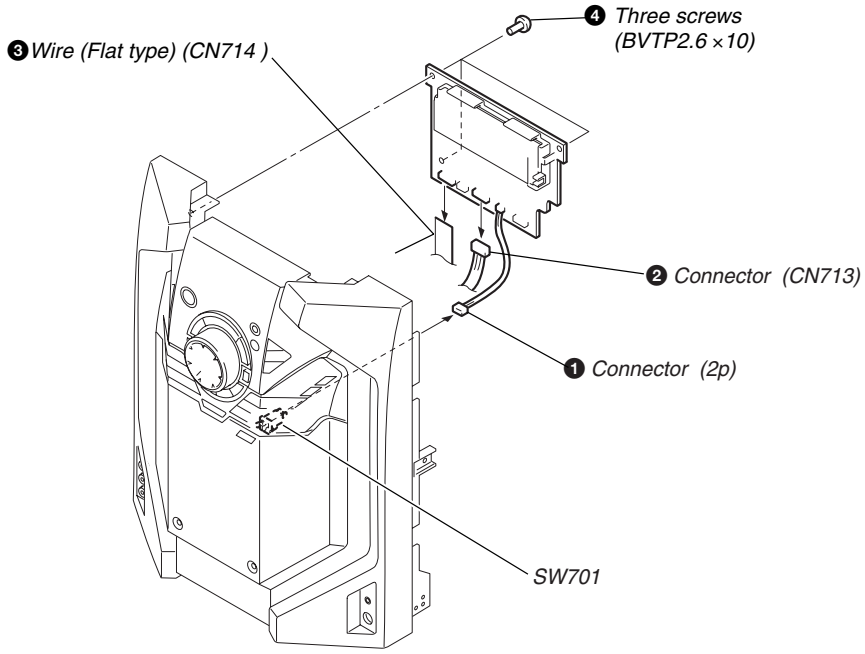
3-14. RX-BASE PC BOARD ASSY, MECHANICAL DECK (CMAL1Z234A), CASSETTE HOLDER



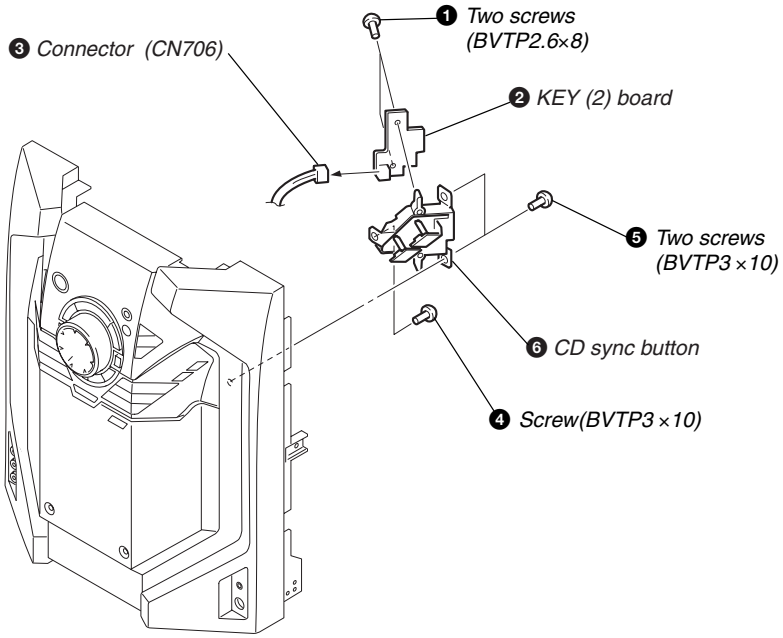
3-15. GAME BOARD, H/P BOARD



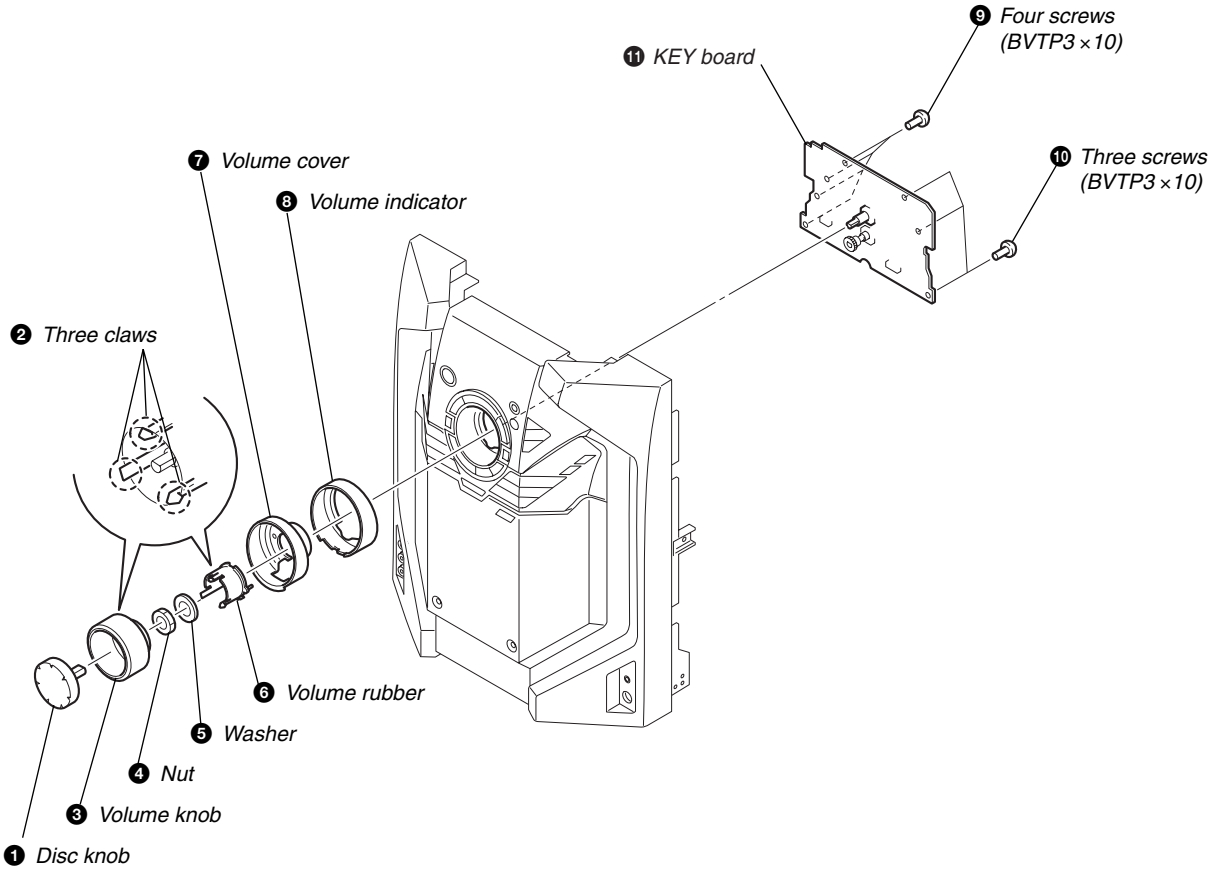
3-16. DISPLAY BOARD



3-17. KEY (2) BOARD, CD SYNC BUTTON



3-18. KEY BOARD, WIRELESS BOARD



SECTION 4
TEST MODE

[Panel Test Mode]

Procedure:

1. Press three buttons of [■] , [MENU], and [DISPLAY] simultaneously.
2. LEDs and fluorescent indicator tube are all turned on.
3. Press the [MENU] button and go to the version display mode. Press the [◀◀] button and go to the key and jog test mode.
4. To release from these mode, press three buttons in the same manner as step 1, or disconnect the power cord.

– Version display mode –

In the version display mode, each time the [MENU] button is pressed, the display changes in the order of MC, GC, CD, CDD, CDM A, CDM B, BDA, BDB, ST, TA, TM and TC.
Press the [I◀◀] button to display the date of the software.

– Key and jog test mode –

In the key check mode, the fluorescent indicator tube displays "K 0 J0 V0". Each time a button is pressed, "K" value increases without [I/⏻] and [DISPLAY] buttons. However, once a button is pressed, it is no longer taken into account.
"J" value increases like 1, 2, 3 ... if turn the [DISC SELECT] dial clockwise, or it decreases like 0, 9, 8 ... if turn the [DISC SELECT] dial counterclockwise.
"V" value increases like 1, 2, 3 ... if turn the [VOLUME] knob clockwise, or it decreases like 0, 9, 8 ... if turn the [VOLUME] knob counterclockwise.

[Cold Reset]

- The cold reset clears all data including preset data stored in the RAM to initial conditions. Execute this mode when returning the set to the customer.

Procedure:

1. Turn the power ON or set to the DEMO mode.
2. Press three buttons of [■], [CLEAR], and [DISPLAY] simultaneously.
3. The set is reset, and becomes DEMO mode.

[CD Ship Mode and RAM Initialize]

- This mode moves the optical pick-up to the position durable to vibration, and initializes the RAM. Use this mode when returning the set to the customer after repair.

Procedure:

1. Press the [I/⏻] button to turn the power ON and select the function CD.
2. Press three buttons of [ENTER], [REPEAT], and [▮▮] simultaneously.
3. The set is turn the power off and initializes the RAM automatically. A message "LOCK" is displayed on the fluorescent indicator tube, and the CD delivery mode is set.

[AM Channel Step 9 kHz/10 kHz Selection Mode]

- The AM tuning interval can be changed over 9 kHz or 10 kHz.

Procedure:

1. Press the [I/⏻] button to turn the power on.
2. Select the function "TUNER", and press the [TUNER/BAND] button to select the BAND "AM".
3. Press the [I/⏻] button to turn the power off.
4. Press the [ENTER] and [I/⏻] buttons simultaneously.
5. Either the message "AM 9k STEP" or "AM 10k STEP" appears, and thus the channel step is changed over.

[CD Service Mode]

- This mode can run the CD sled motor optionally. Use this mode, for instance, when cleaning the optical pick-up.

Procedure:

1. Press the [I/⏻] button to turn the power ON.
2. Select the function "CD".
3. Press three buttons of [ENTER], [▶▶] , and [PLAY MODE] simultaneously.
4. Set to the Sled Servo mode.
5. With the CD in stop status, press the [▶▶] button to move the optical pick-up to outside track and display "SLED OUT", or press the [◀◀] button to move the optical pick-up to inside track and display "SLED IN".
6. To exit from this mode, perform as follows.
   1) Move the optical pick-up to the most inside track.
   2) Press three buttons of [■] , [CLEAR], and [DISPLAY] simultaneously. (cold reset)

Notes:
- Always move the optical pick-up to most inside track when exiting from this mode. Otherwise, a disc will not be unloaded.
- Do not run the sled motor excessively, otherwise the gear can be chipped.

[VACS Test Mode]

- This mode is used to switch on and off the VACS (Variable Attenuation Control System).

Procedure:

1. Press the [I/⏻] button to turn the set on.
2. To enter the test mode, press the two buttons [ENTER] , [PLAY MODE] and [▮▮] simultaneously.
3. The message "VACS OFF" or "VACS ON" appears.
4. To exit from this mode, press the [I/⏻] button to turn the set off.

[Function Selection Mode]

- This mode is used to select the input VIDEO or input MD.

Procedure:

1. Turn off the set.
2. Press the two buttons [■] and [VIDEO (MD)] simultaneously.
3. The message "VIDEO" or "MD" appears.
4. To exit from this mode, press the [I/⏻] button to turn the set off.

SECTION 5
MECHANICAL ADJUSTMENTS

• TAPE MECHANISM DECK SECTION

Precaution

1. Clean the following parts with a denatured alcohol-moistened swab:
   record/playback heads, erase head, capstan, pinch rollers, rubber belts, idlers
2. Demagnetize the record/playback head with a head demagnetizer.
3. Do not use a magnetized screwdriver for the adjustments.
4. After the adjustments, apply suitable locking compound to the parts adjusted.
5. The adjustments should be performed with the rated power supply voltage unless otherwise noted.

Torque Measurement

Mode	Torque meter	Meter reading
FWD	CQ-102C	2.44 mN • m to 8.33 mN • m 30 to 85 g • cm (0.42 – 1.17 oz • inch)
FWD /REV back tension	CQ-102C	0.14 mN • m to 0.59 mN • m 2 to 6 g • cm (0.03 – 0.08 oz • inch)
REV	CQ-102RC	2.94 mN • m to 7.84 mN • m 31 to 71 g • cm (0.43 – 0.98 oz • inch)
FF/REW	CQ-201B	6.86 mN • m to 20.6 mN • m 71 to 210 g • cm (0.98 – 2.91 oz • inch)

SECTION 6
ELECTRICAL ADJUSTMENTS

DECK SECTION | 0 dB = 0.775 V

Precaution

1. Demagnetize the record/playback head with a head demagnetizer.
2. Do not use a magnetized screwdriver for the adjustments.
3. After the adjustments, apply suitable locking compound to the parts adjust.
4. The adjustments should be performed with the rated power supply voltage unless otherwise noted.
5. The adjustments should be performed in the order given in this service manual. (As a general rule, playback circuit adjustment should be completed before performing recording circuit adjustment.)
6. The adjustments should be performed for both L-CH and R-CH.
7. Switches and controls should be set as follows unless otherwise specified.

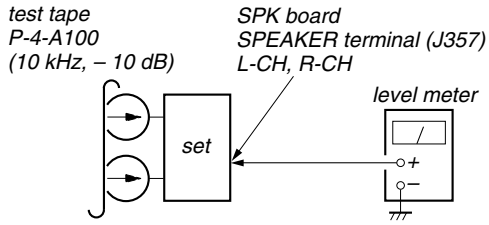
• Test Tape

Tape	Signal	Used for
P-4-A100	10 kHz, – 10 dB	Azimuth Adjustment
WS-48B	3 kHz, 0 dB	Tape Speed Check

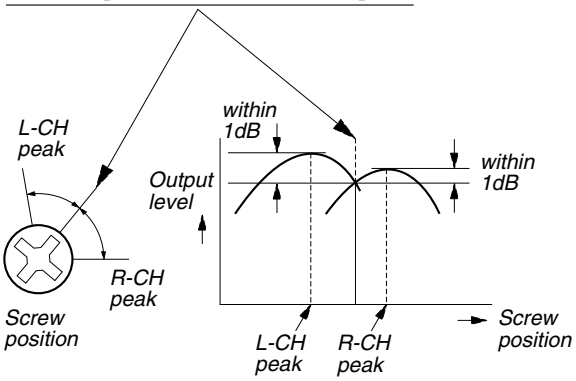
Record/Playback Head Azimuth Adjustment

Procedure:

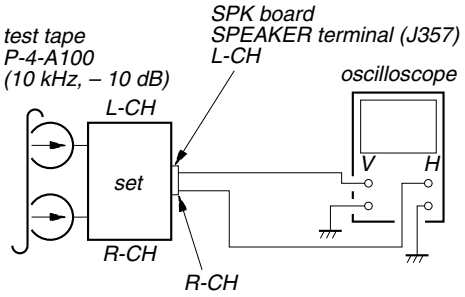
1. Mode: Playback (FWD)

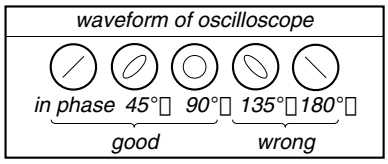


2. Turn the adjustment screw and check output peaks. If the peaks do not match for L-CH and R-CH, turn the adjustment screw so that outputs match within 1dB of peak.



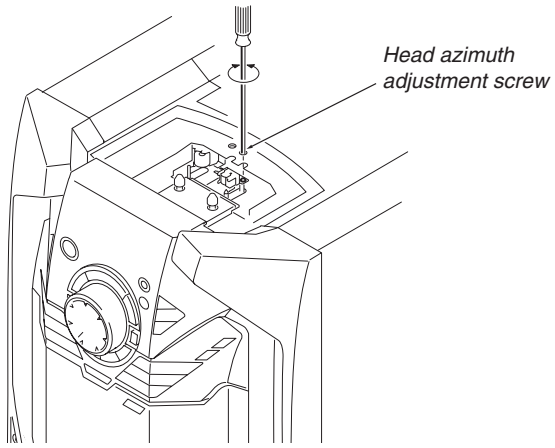
3. Mode: Playback





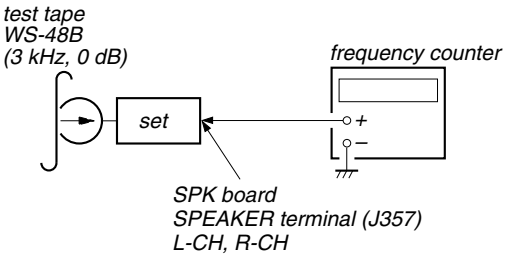
4. Reapeat step 1 to 3 in playback (REV) mode.
5. After the adjustments, apply suitable locking compound to the parts adjusted.

Adjustment Location: Record/Playback/Erase Head



Tape Speed Check

Mode: Playback



1. Insert the WS-48B into the deck.
2. Press the ◀▶ button on the deck.
3. Confirm that the frequency counter reads 3,000 ± 90 Hz.

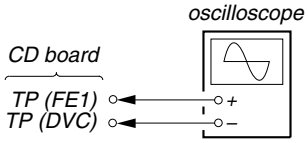
Sample value of Wow and Flutter: 0.3% or less W.RMS (JIS)
(WS-48B)

CD SECTION

Note:
1. CD Block is basically designed to operate without adjustment. Therefore, check each item in order given.
2. Use YEDS-18 disc (3-702-101-01) unless otherwise indicated.
3. Use an oscilloscope with more than 10MΩ impedance.
4. Clean the object lens by an applicator with neutral detergent when the signal level is low than specified value with the following checks.

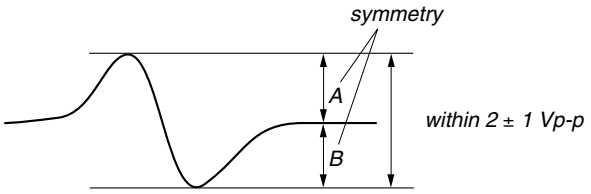
S-curve Check

Connection:



Procedure:
1. Connect an oscilloscope to test point TP (FE1) and TP (DVC) on the CD board.
2. Turn the power on.
3. Put the disc (YEDS-18) in and turned power switch on again and actuate the focus search. (actuate the focus search when disc table is moving in and out)
4. Check the oscilloscope waveform (S-curve) is symmetrical between A and B. And confirm peak to peak level within 2 ± 1 Vp-p.

S-curve waveform

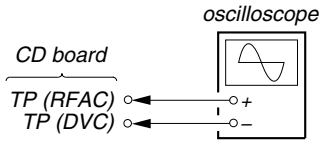


Note: • Try to measure several times to make sure than the ratio of A : B or B : A is more than 10 : 7.
• Take sweep time as long as possible and light up the brightness to obtain best waveform.

Checking Location: CD board (Conductor side)
(See page 21.)

RFAC Level Check

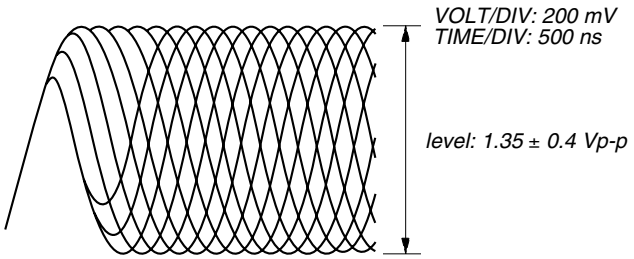
Connection:



Procedure:
1. Connect an oscilloscope to test point TP (RFAC) and TP (DVC) on the CD board.
2. Turn the power on.
3. Put the disc (YEDS-18) in to playback the number five track.
4. Confirm that oscilloscope waveform is clear and check RFAC signal level is correct or not.

Note: A clear RFAC signal waveform means that the shape "◊" can be clearly distinguished at the center of the waveform.

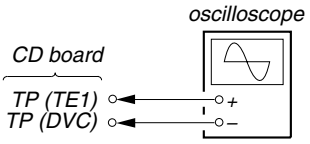
RFAC signal waveform



Checking Location: CD board (Conductor side)
(See page 21.)

E-F Balance Check

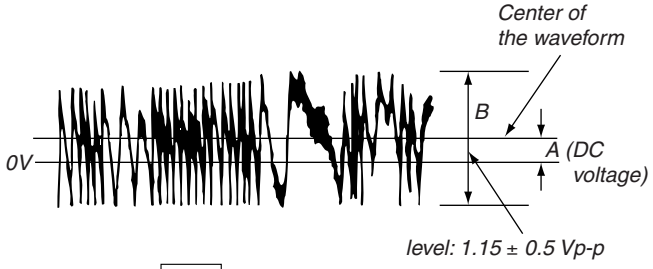
Connection:



Procedure:

1. Connect an oscilloscpe to test point TP (TE1) and TP (DVC) on the CD board.
2. Turn the power on.
3. Select the function “CD”.
4. Press three buttons of [ENTER], [▶▶] , and [PLAY MODE] simultaneously to set the CD service mode.
5. Put the disc (YEDS-18) in to playback the number five track.
6. Press the [I◀◀] button. The message “TRAVERSE” is displayed. (The tracking servo and the sledding servo are turned OFF)
7. Check the level B of the oscilliscope's waveform and the A (DC voltage) of the center of the Traverse waveform.
   Confirm the following :
   A/B x 100 = less than ± 22%

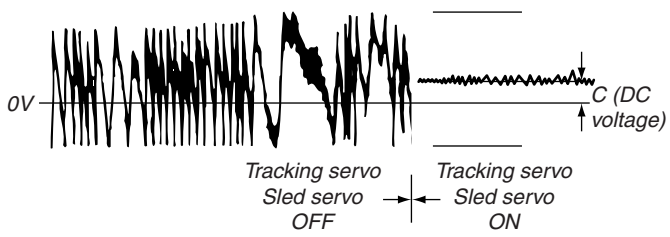
Traverse Waveform



8. Press the [I◀◀] button. The message “TRAVERSE” is displayed. (The tracking servo and sledding servo are turned ON)
   Confirm the C (DC voltage) is almost equal to the A (DC voltage) is step 5.
9. To exit from this mode, perform as follows.
   1) Move the optical pick-up to the most inside track.
   2) Press three buttons of [■] , [CLEAR], and [DISPLAY] simultaneously. (cold reset)

Notes:
- Always move the optical pick-up to most inside track when exiting from this mode. Otherwise, a disc will not be unloaded.
- Do not run the sled motor excessively, otherwise the gear can be chipped.

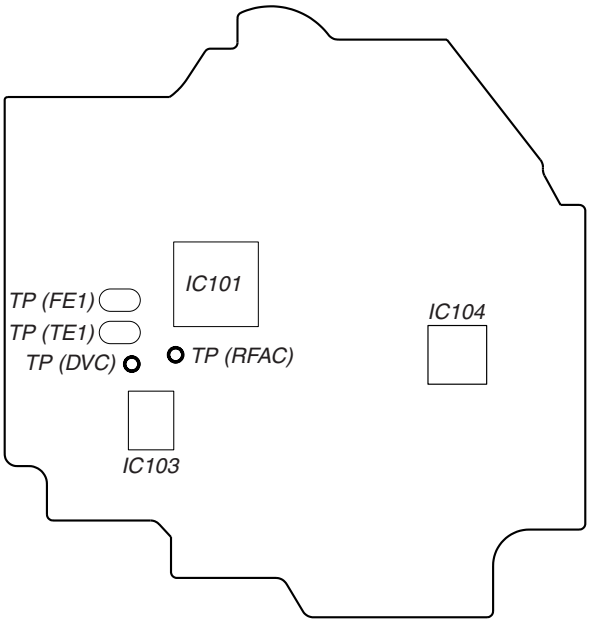
Traverse Waveform



Checking Location: CD board (Conductor side)

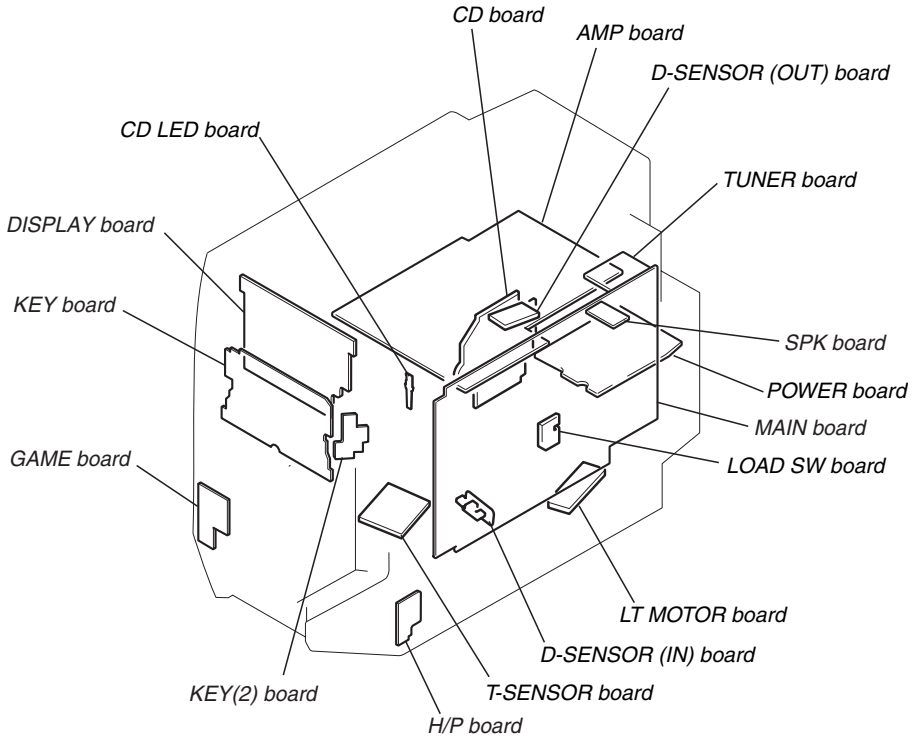
Checking Location:

– CD BOARD (Conductor Side) –



SECTION 7
DIAGRAMS

7-1. Circuit Boards Location



THIS NOTE IS COMMON FOR PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS.
(In addition to this, the necessary note is printed in each block.)

For schematic diagrams.

Note:

- All capacitors are in μF unless otherwise noted. pF: μμF 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.
- △ : internal component.
- : nonflammable resistor.
- : fusible resistor.
- : panel designation.

Note:	**Note:**
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une piéce portant le numéro spécifié.

- : B+ Line.
- : B– Line.
- Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions.
  CD board section
  no mark : CD PLAY
  Other board section
  no mark : FM
  ( ) : TAPE PLAY
  < > : TAPE REC
  [ ] : CD PLAY
- Voltages are taken with a VOM (Input impedance 10 MΩ). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
  : FM
  : AM
  : CD
  : DIGITAL OUT
  : TAPE (PB)
  : TAPE (REC)
  : AUDIO IN
  : VIDEO IN

For printed wiring boards.

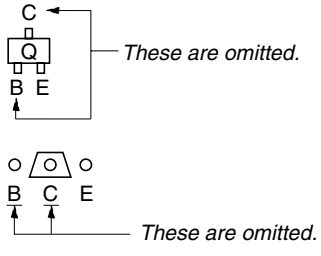
Note:

- : parts extracted from the component side.
- : parts extracted from the conductor side.
- △ : internal component.
- : Pattern from the side which enables seeing.

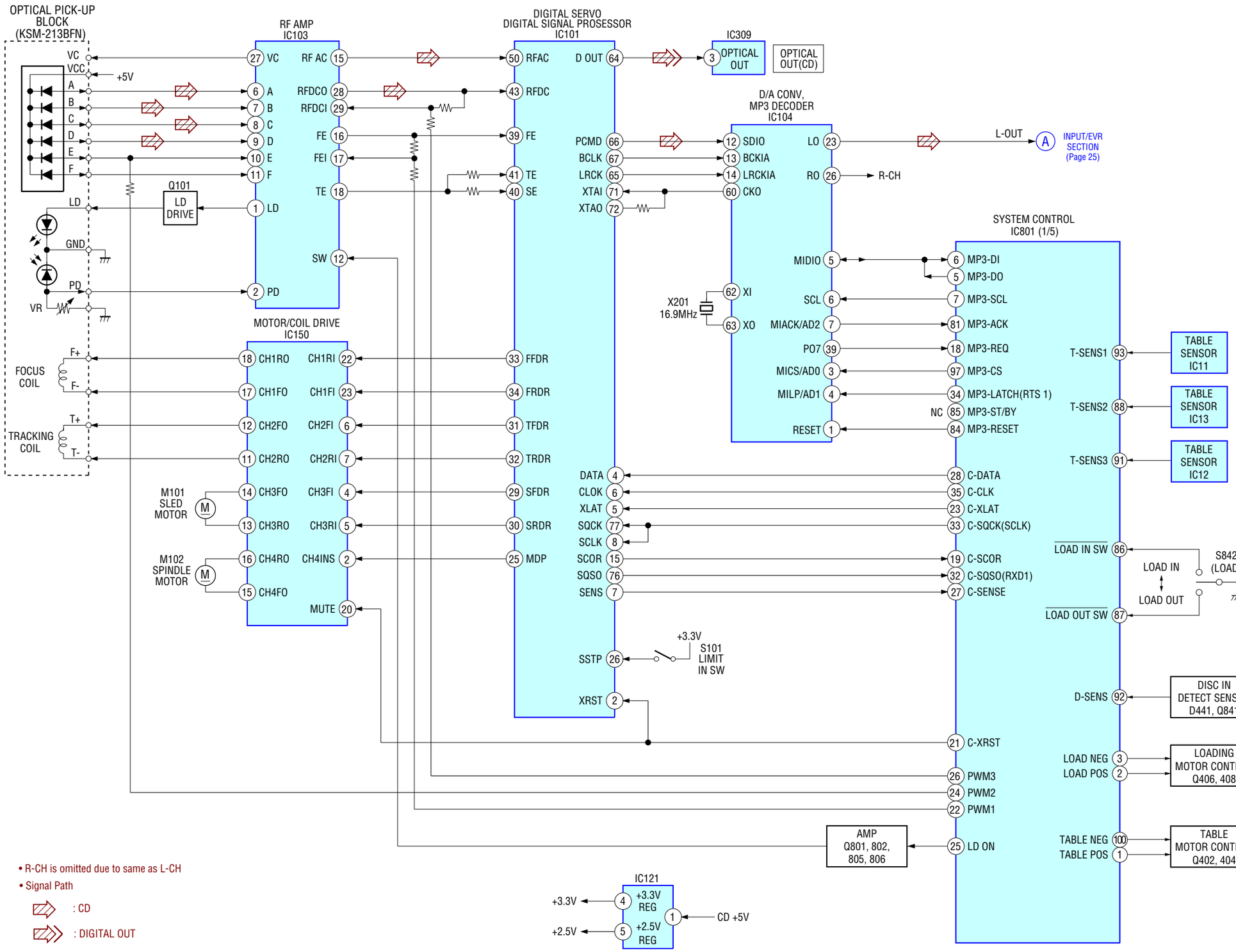
(The other layers' patterns are not indicated.)

Caution:	
Pattern face side: (Conductor B)	Parts on the pattern face side seen from the pattern face are indicated.
Parts face side: (Component A)	Parts on the parts face side seen from the parts face are indicated.

- **Indication of transistor**



7-2. Block Diagrams – CD Section –

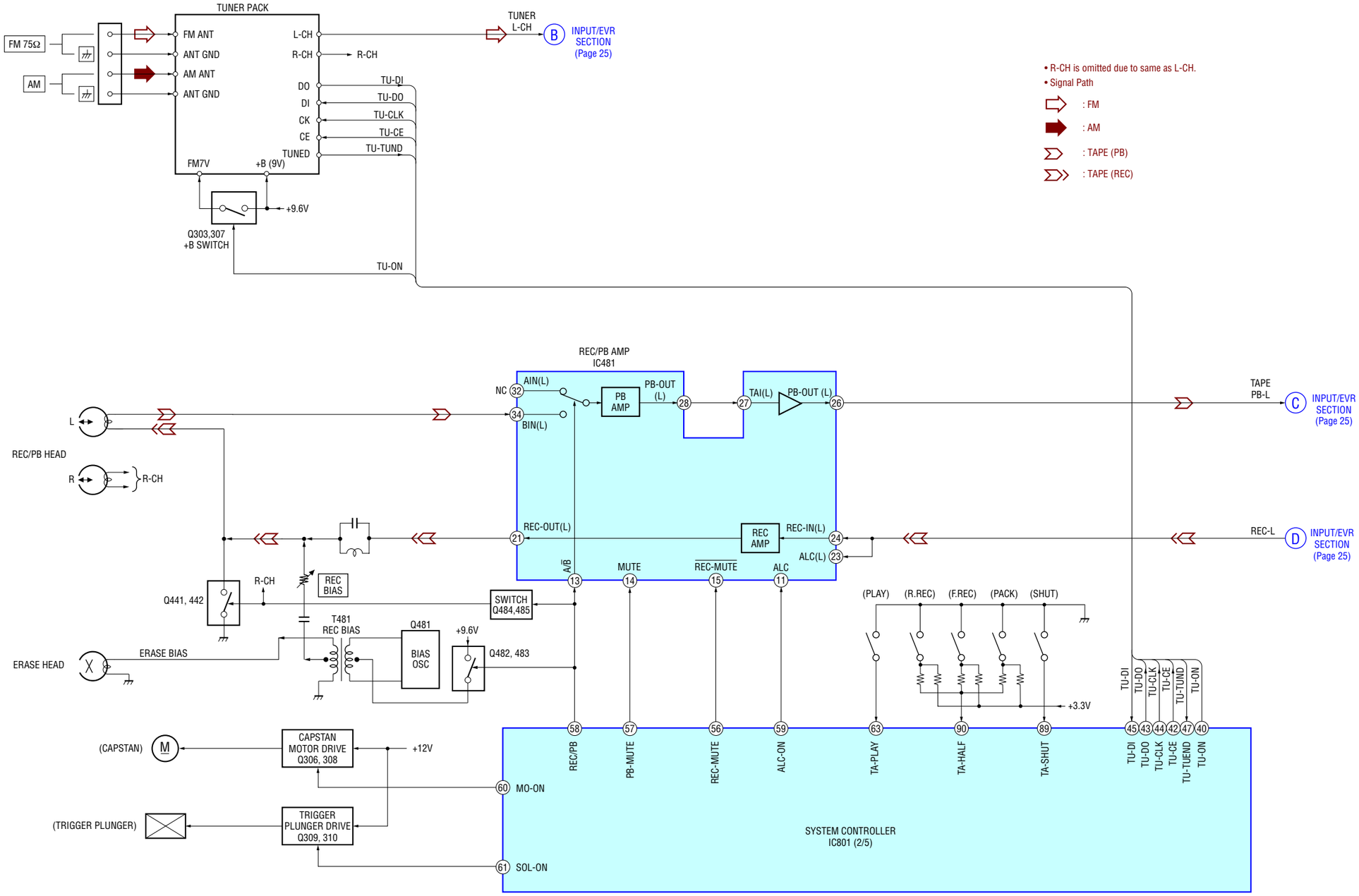


- R-CH is omitted due to same as L-CH
- Signal Path

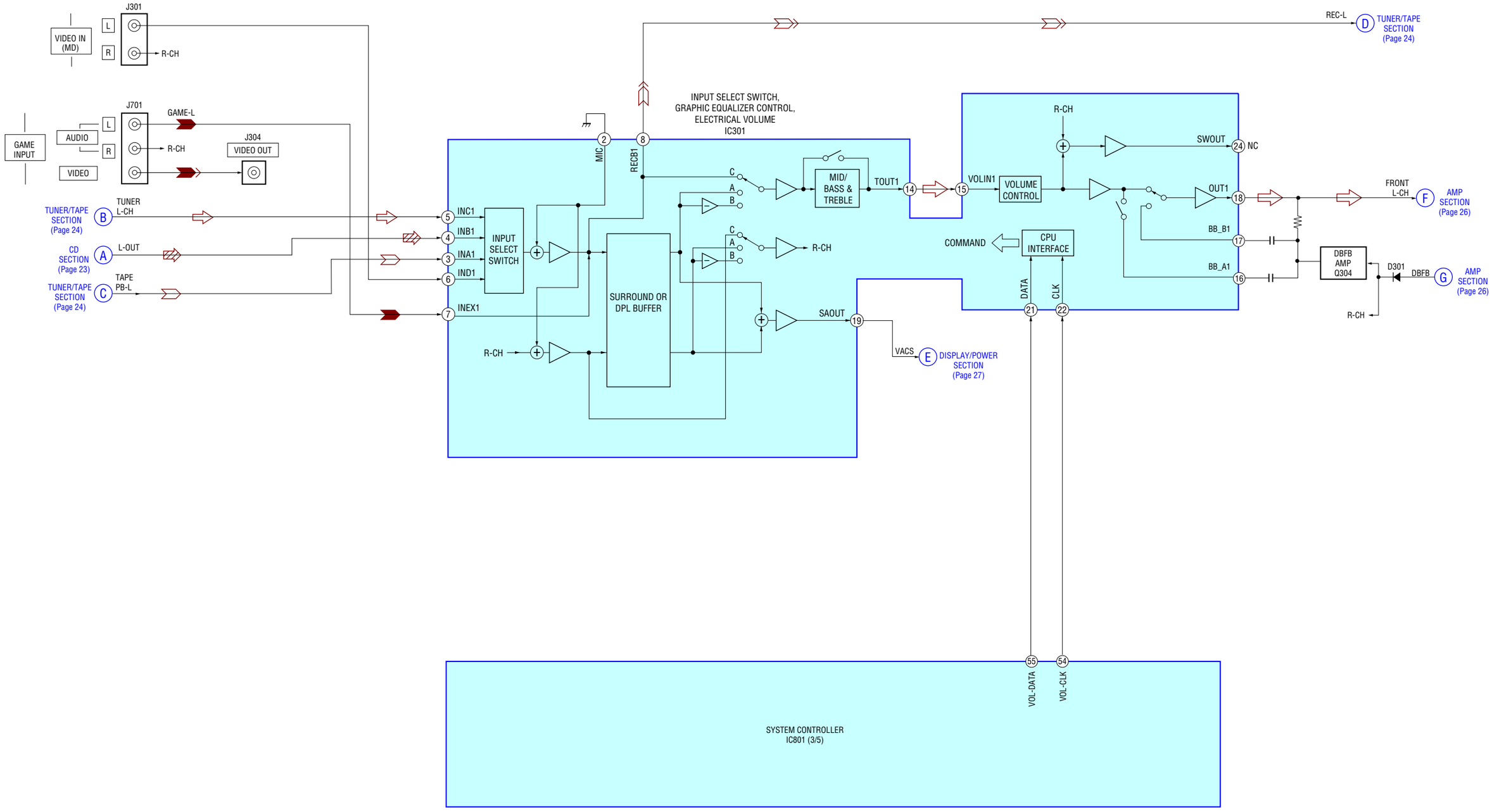
: CD

: DIGITAL OUT

– TUNER/TAPE DECK Section –



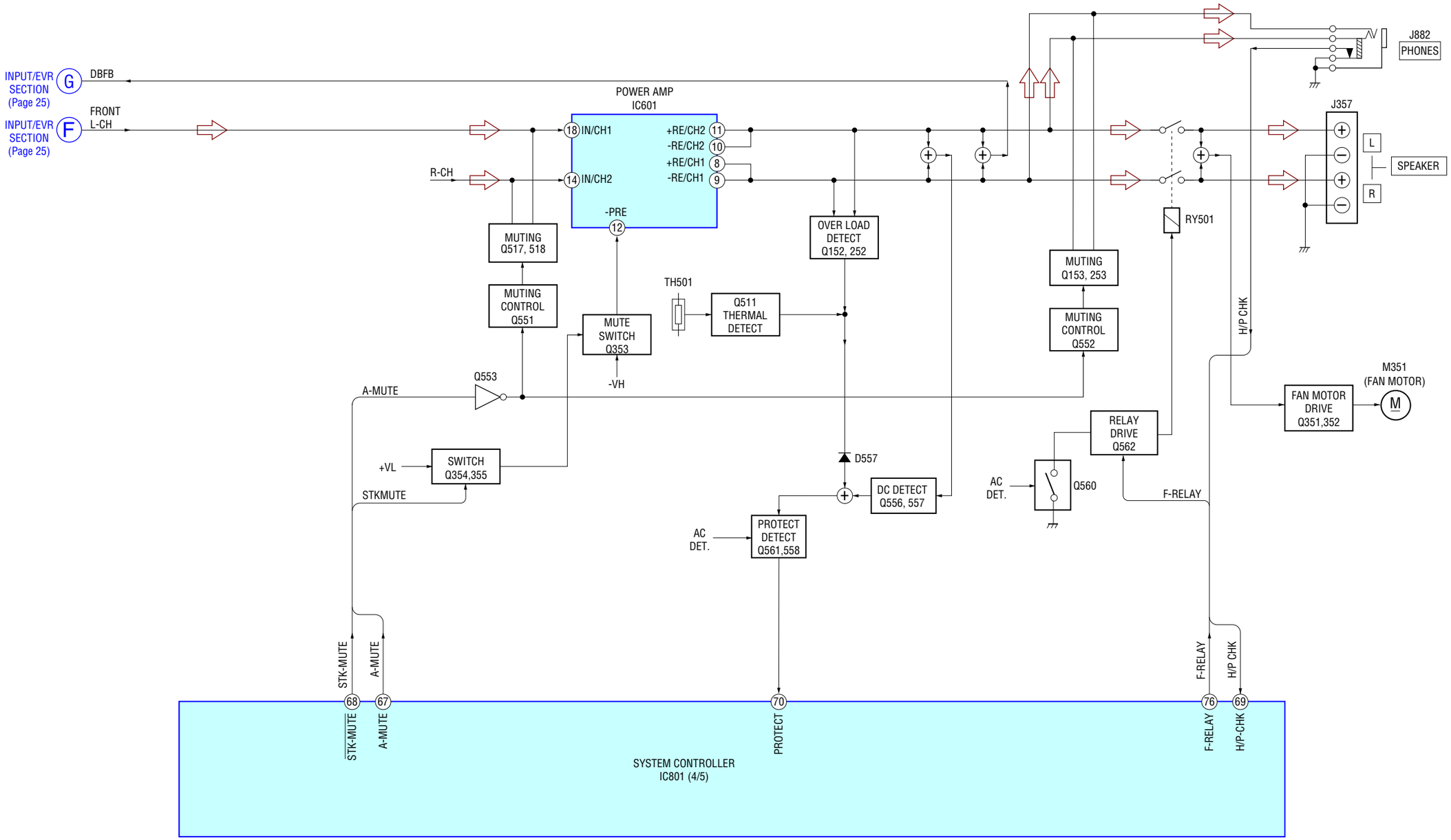
– INPUT/EVR Section –



• R-CH is omitted due to same as L-CH
• Signal Path

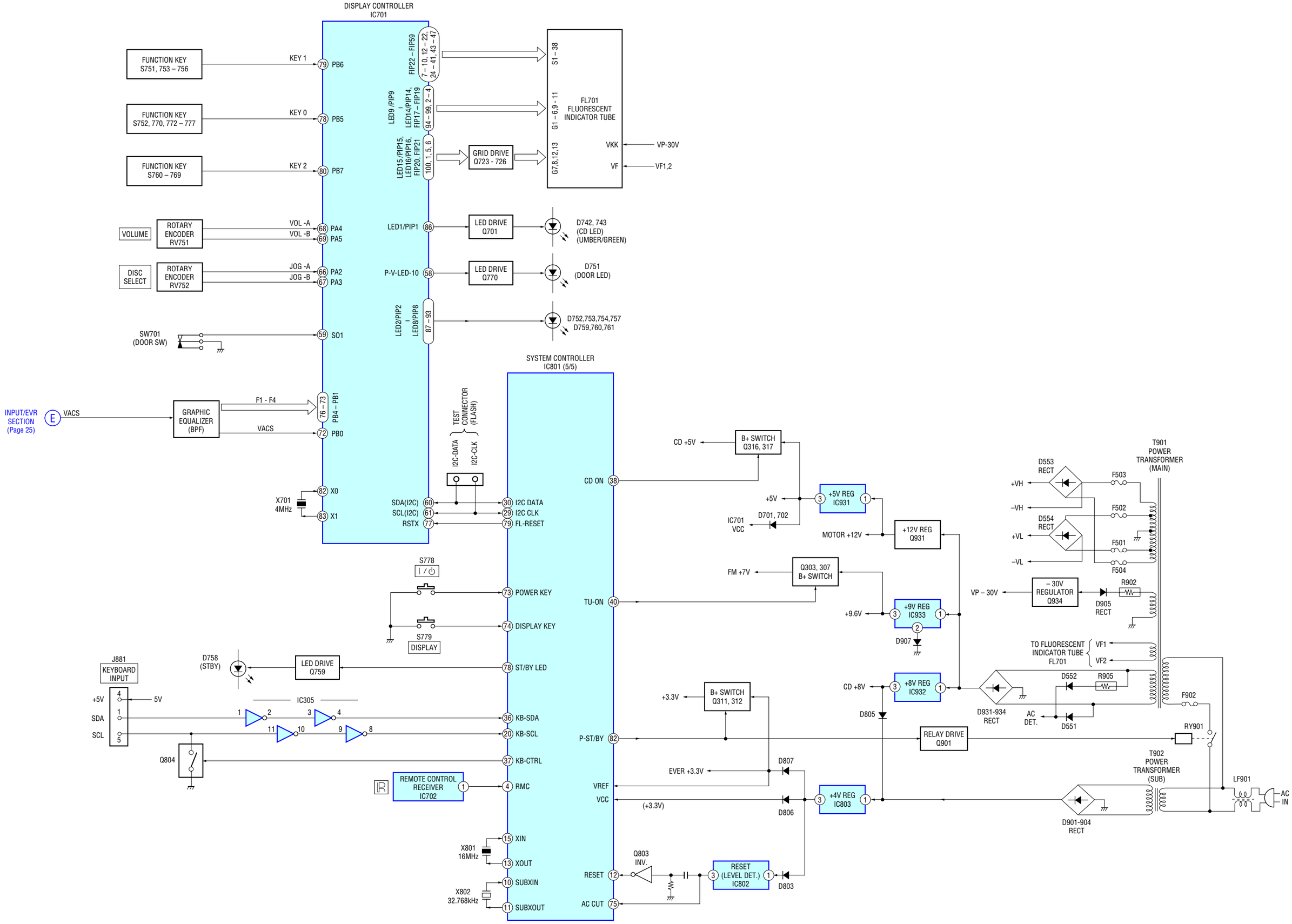
: FM
: CD
: TAPE (PB)
: TAPE (REC)
: AUDIO IN
: VIDEO IN

– AMP Section –



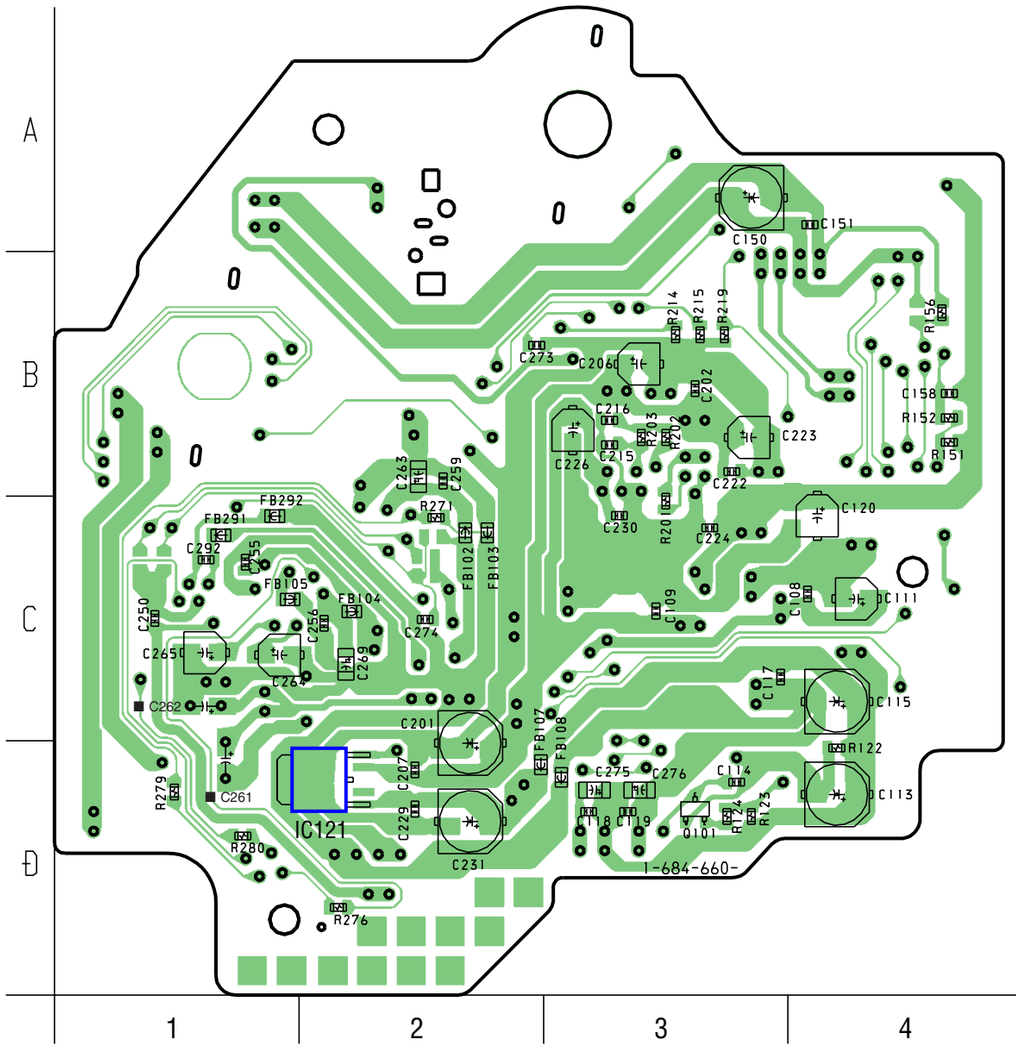
- R-ch is omitted due to same as L-ch.
- Signal Path
  ⇨ : FM

– DISPLAY/POWER Supply Section –

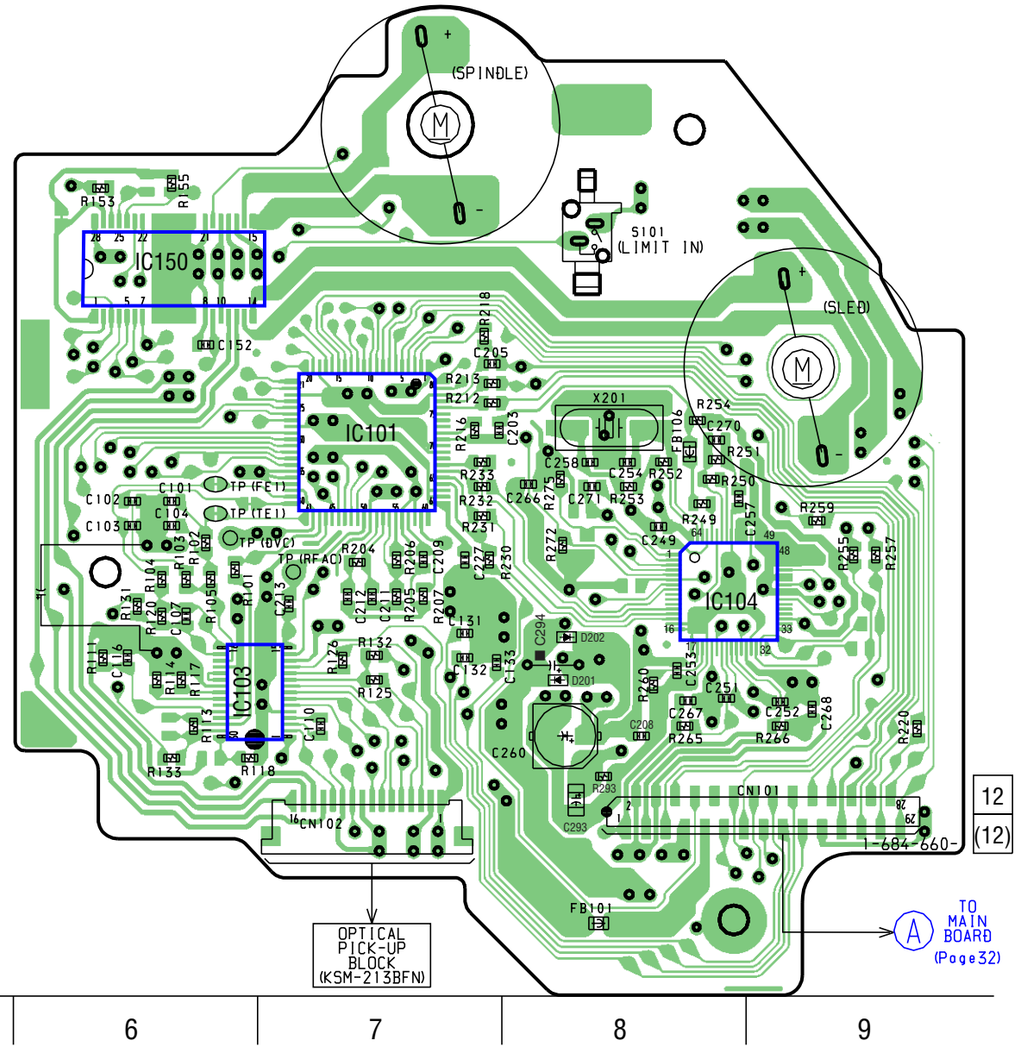


7-3. Printed Wiring Board – CD Section – • See page 22 for Circuit Boards Location.

【CD BOARD】(SIDE A)



【CD BOARD】(SIDE B)



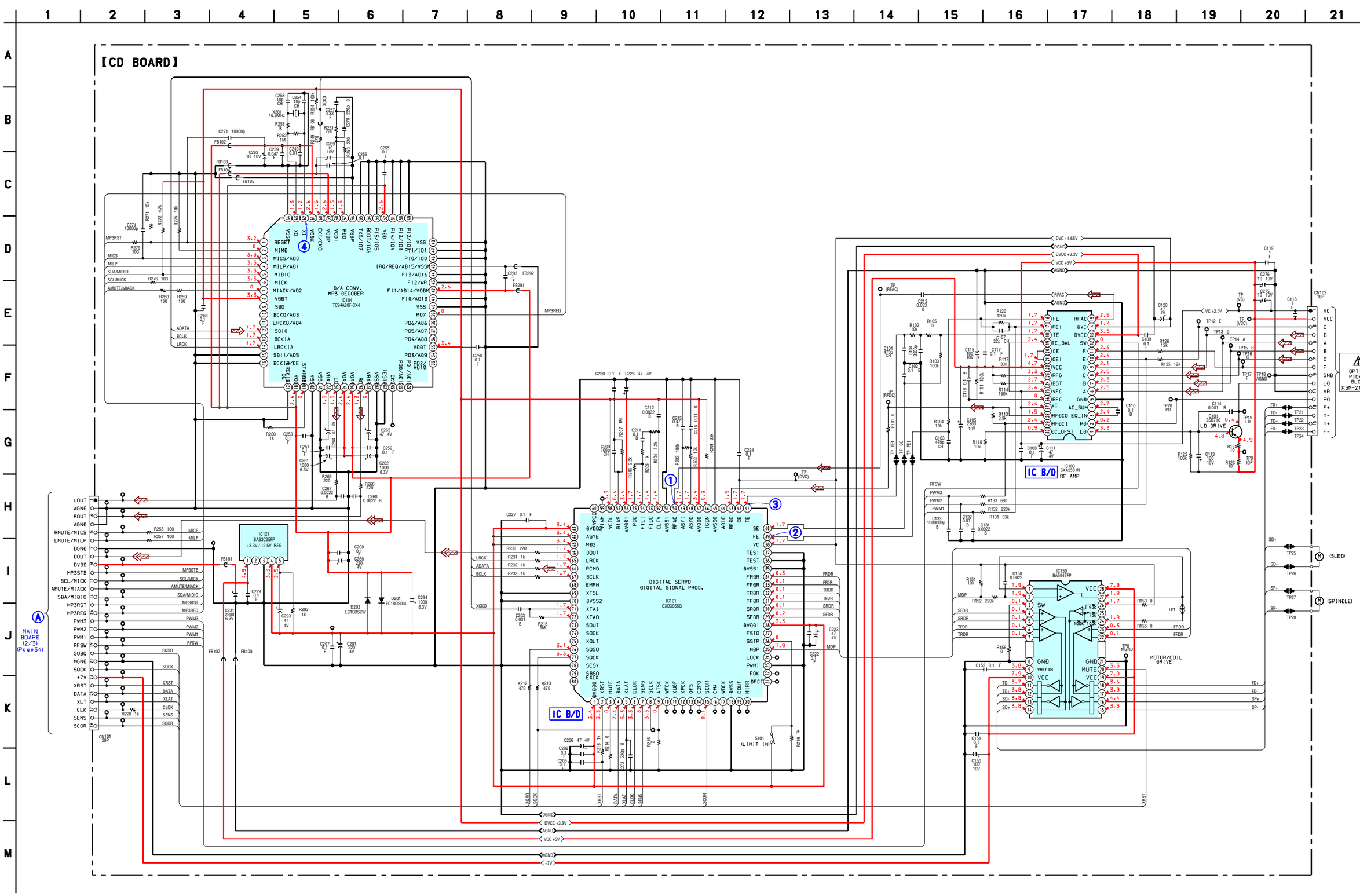
1 2 3 4 5 6 7 8 9

• **Semiconductor Location**

Ref. No.	Location
D201	C-8
D202	C-8
IC101	B-7
IC103	B-6
IC104	B-8
IC121	D-2
IC150	B-6
Q101	D-3

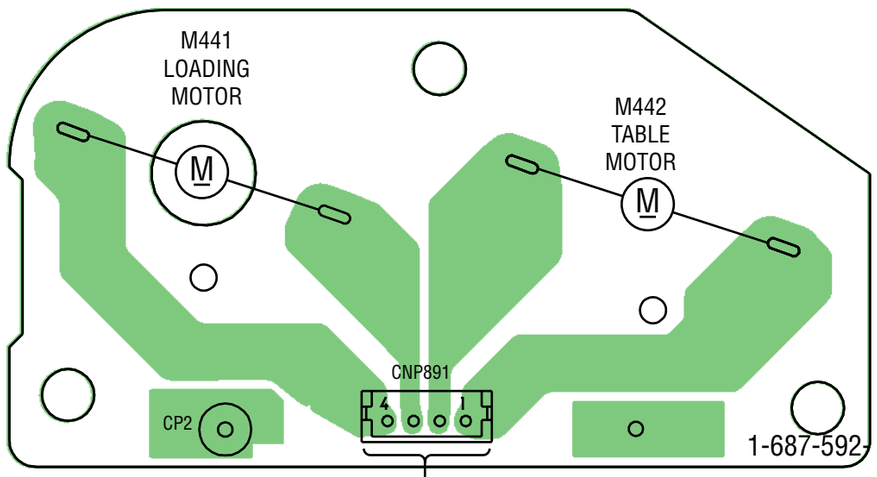
7-4. Schematic Diagram – CD Section – • See page 46 for IC Pin Function Description.

【CD BOARD】

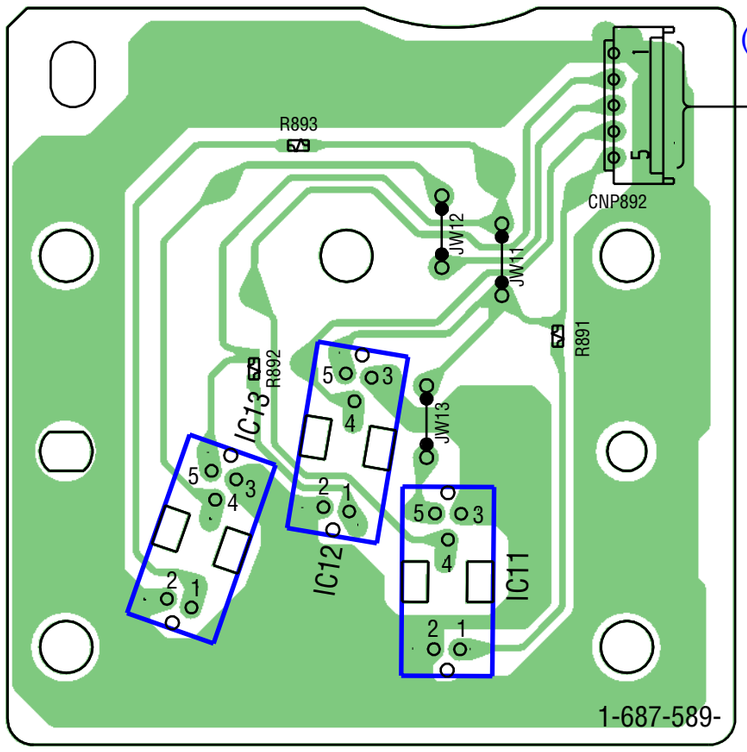


7-5. Printed Wiring Board – CD MOTOR/SENSOR Section – • See page 22 for Circuit Boards Location.

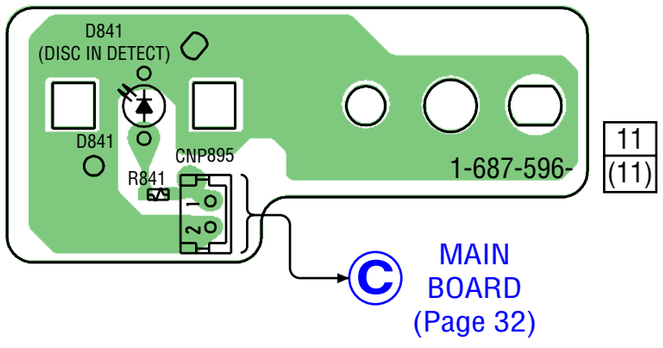
【L.T MOTOR BOARD】



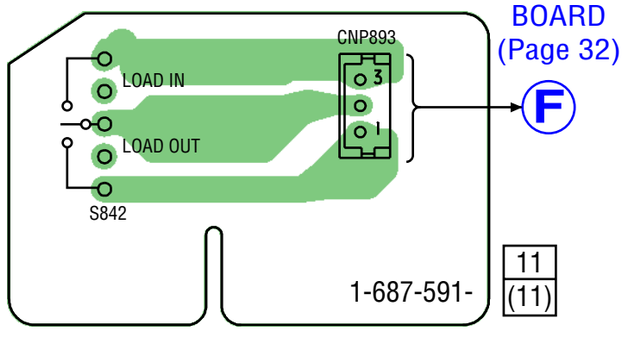
【T–SENSOR BOARD】



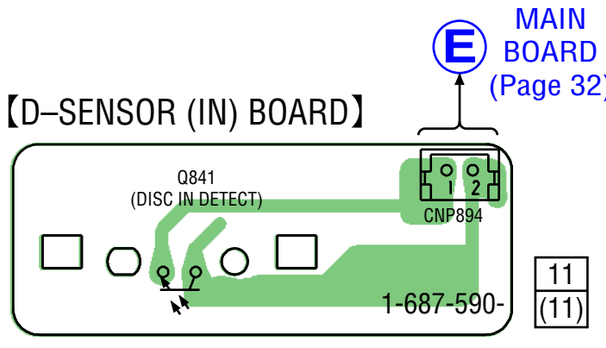
【D–SENSOR(OUT) BOARD】



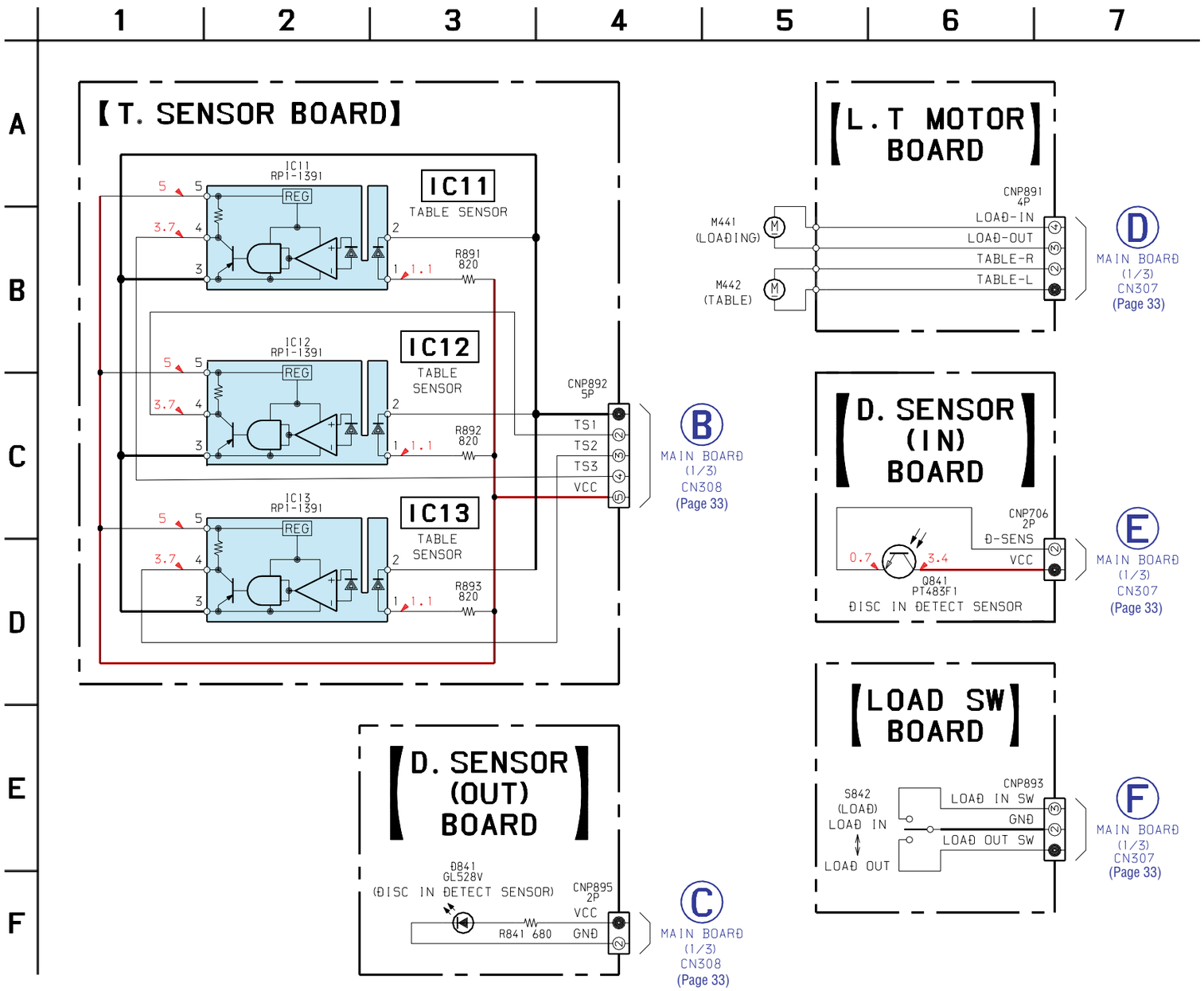
【LOAD SW BOARD】



【D–SENSOR (IN) BOARD】

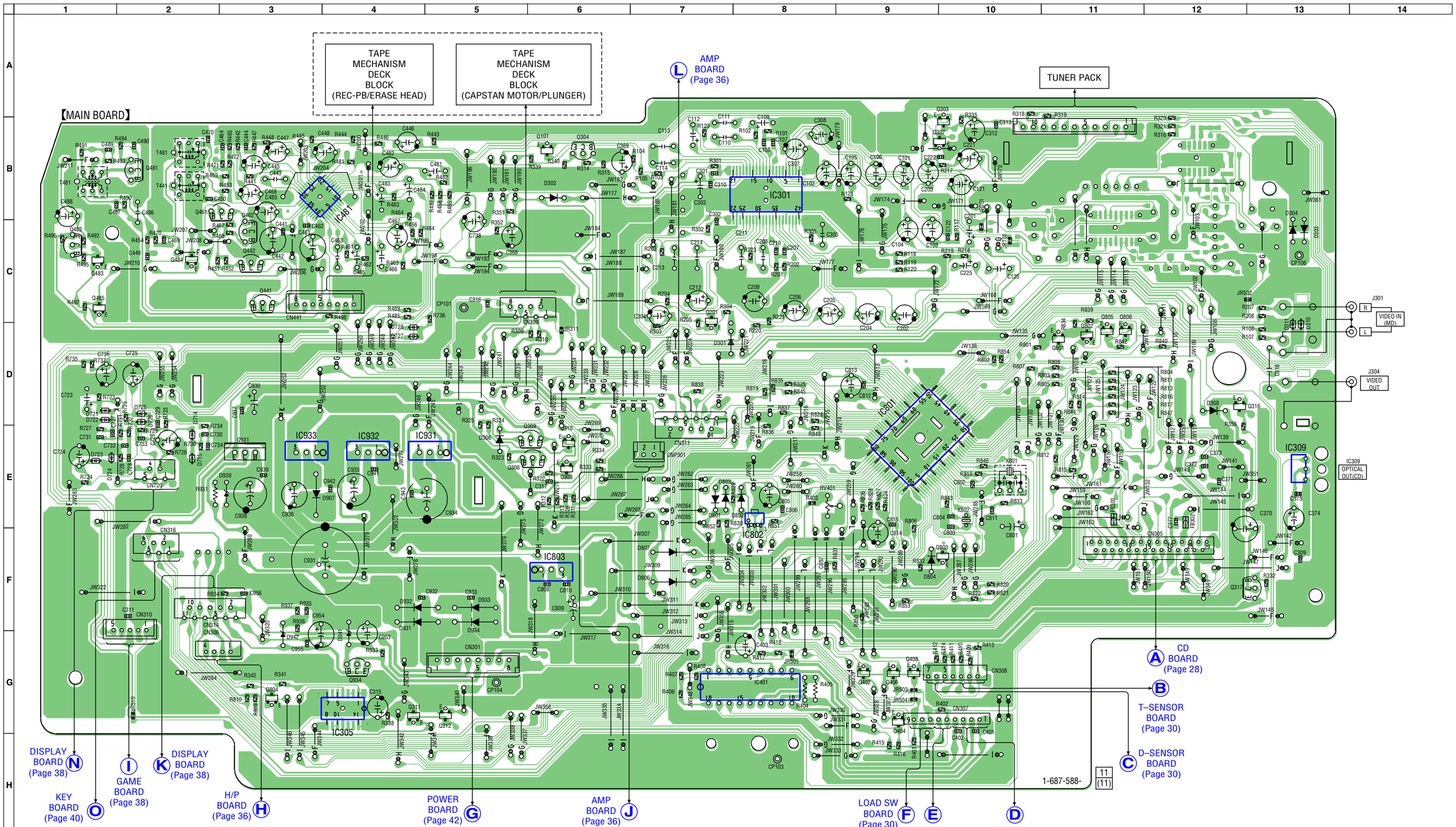


7-6. Schematic Diagram – CD MOTOR/SENSOR Section –



7-7. Printed Wiring Board – MAIN Section –

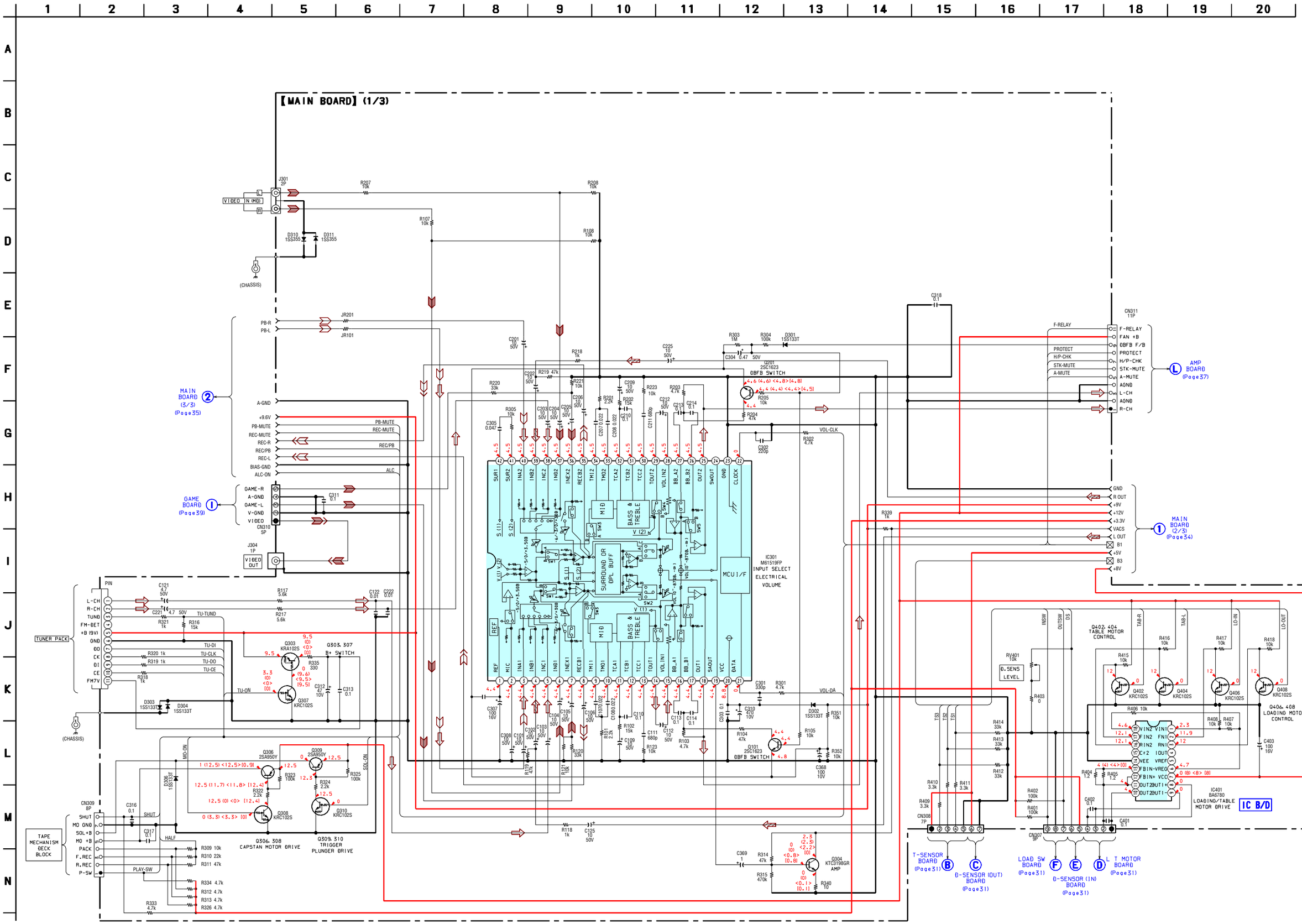
• See page 22 for Circuit Boards Location.



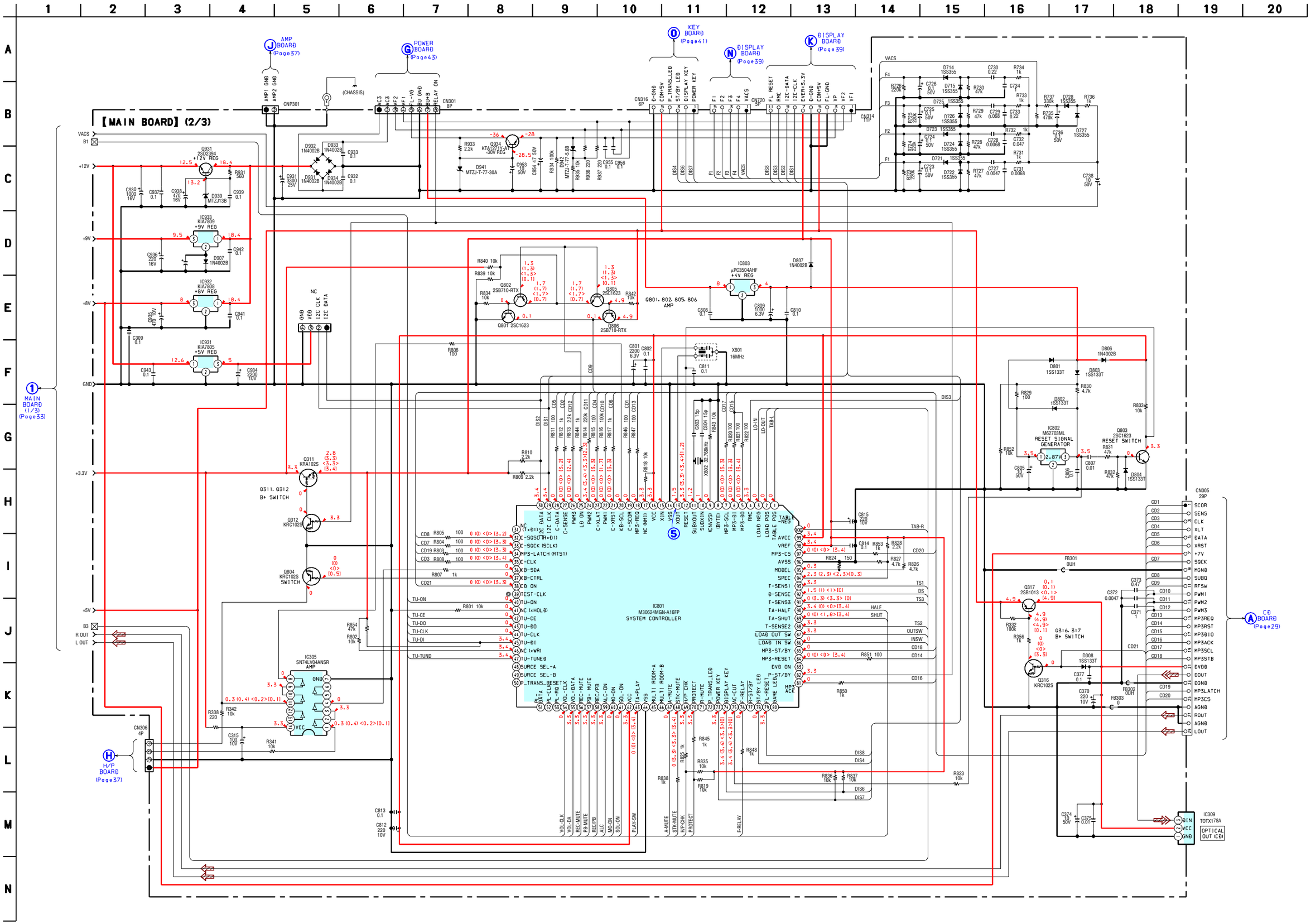
• Semiconductor Location

Ref. No.	Location	Ref. No.	Location	Ref. No.	Location	Ref. No.	Location	Ref. No.	Location	Ref. No.	Location	Ref. No.	Location
D301	D-7	D723	E-1	D907	E-3	IC401	G-8	Q304	B-6	Q406	G-9	Q802	D-11
D302	B-6	D724	E-1	D931	F-4	IC481	B-4	Q306	E-6	Q408	G-9	Q803	F-10
D303	C-13	D725	D-2	D932	F-4	IC801	E-9	Q307	B-10	Q441	C-3	Q804	G-3
D304	C-13	D726	D-2	D933	F-5	IC802	E-8	Q308	E-6	Q442	C-3	Q805	D-11
D306	E-5	D727	D-4	D934	F-5	IC803	F-6	Q309	E-6	Q461	B-2	Q806	D-11
D308	D-12	D728	D-4	D939	E-3	IC931	E-5	Q310	E-6	Q462	C-3	Q931	E-3
D310	D-13	D801	E-7	D941	G-4	IC932	E-4	Q311	G-4	Q481	B-2	Q934	G-4
D311	D-13	D802	E-8	D942	G-3	IC933	E-3	Q312	G-5	Q482	C-1		
D714	E-2	D803	E-7					Q316	D-12	Q483	C-1		
D715	E-2	D804	F-9	IC301	B-8	Q101	B-6	Q317	F-13	Q484	C-2		
D721	D-1	D806	F-7	IC305	G-4	Q201	C-7	Q402	G-9	Q485	C-1		
D722	D-1	D807	F-7	IC309	E-13	Q303	B-10	Q404	G-9	Q801	D-11		

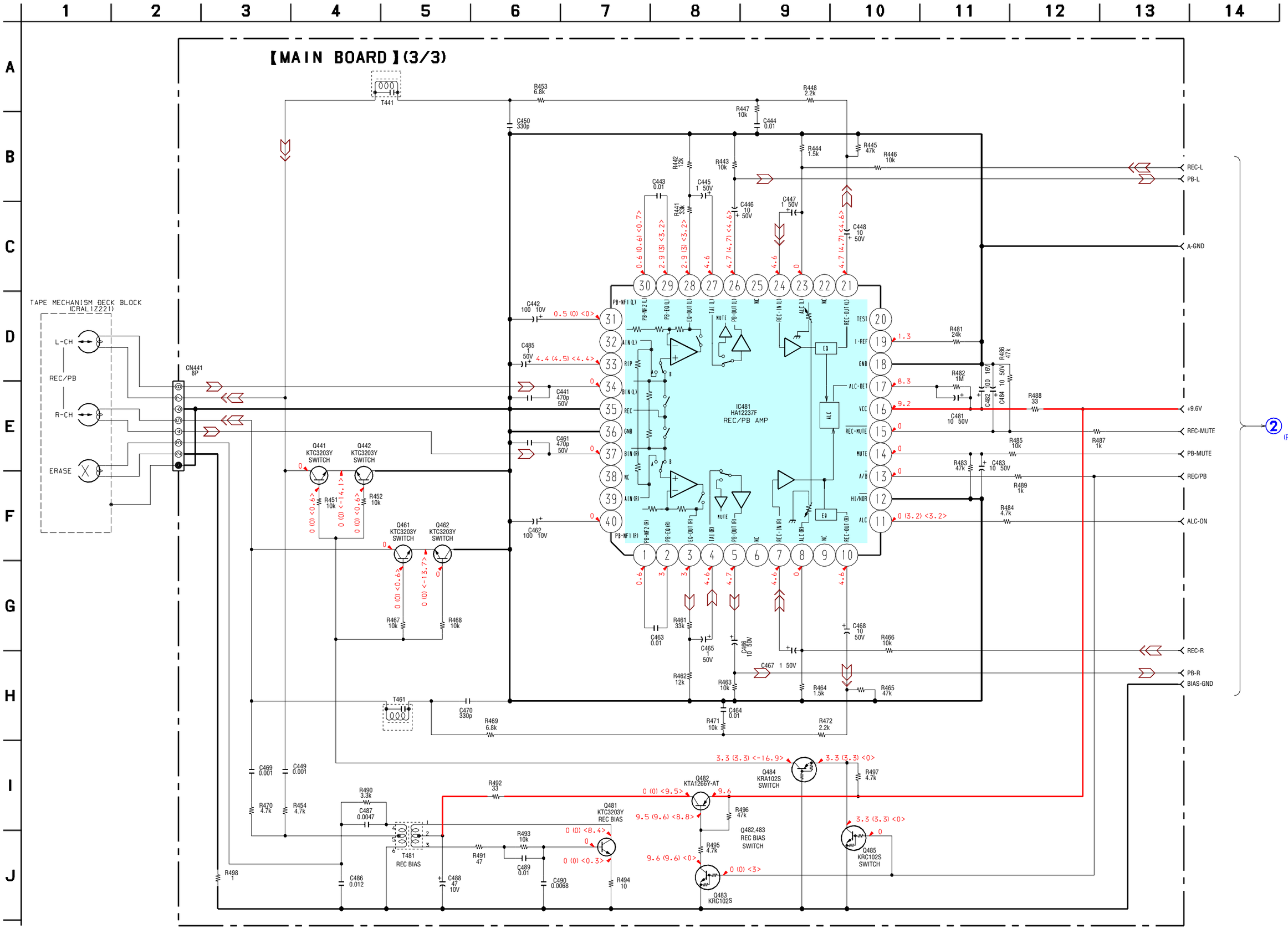
7-8. Schematic Diagram – MAIN Section (1/3) –



7-9. Schematic Diagram – MAIN Section (2/3) – • See page 48 for IC Pin Function Description.

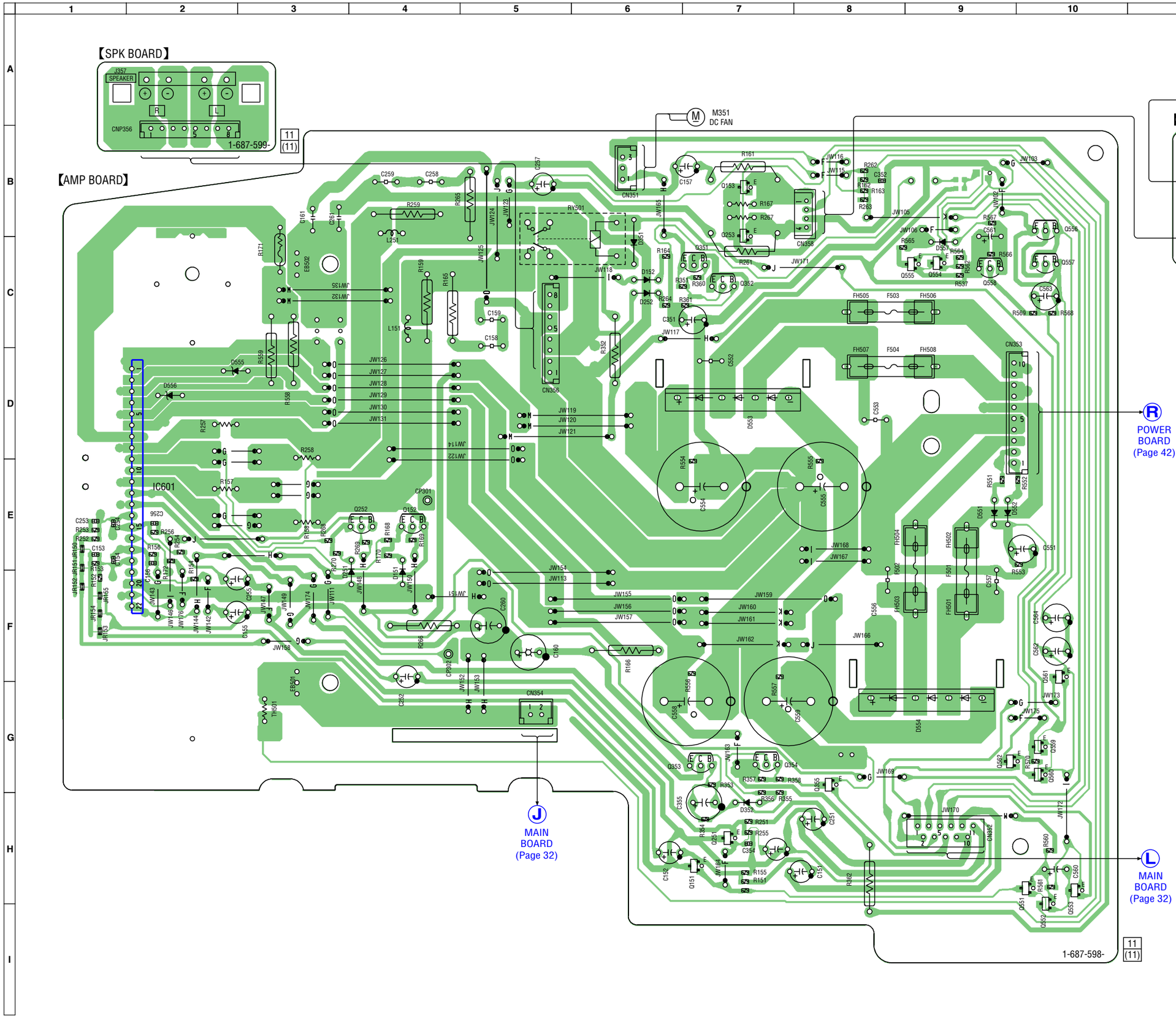


7-10. Schematic Diagram – MAIN Section (3/3) –



7-11. Printed Wiring Board – AMP Section –

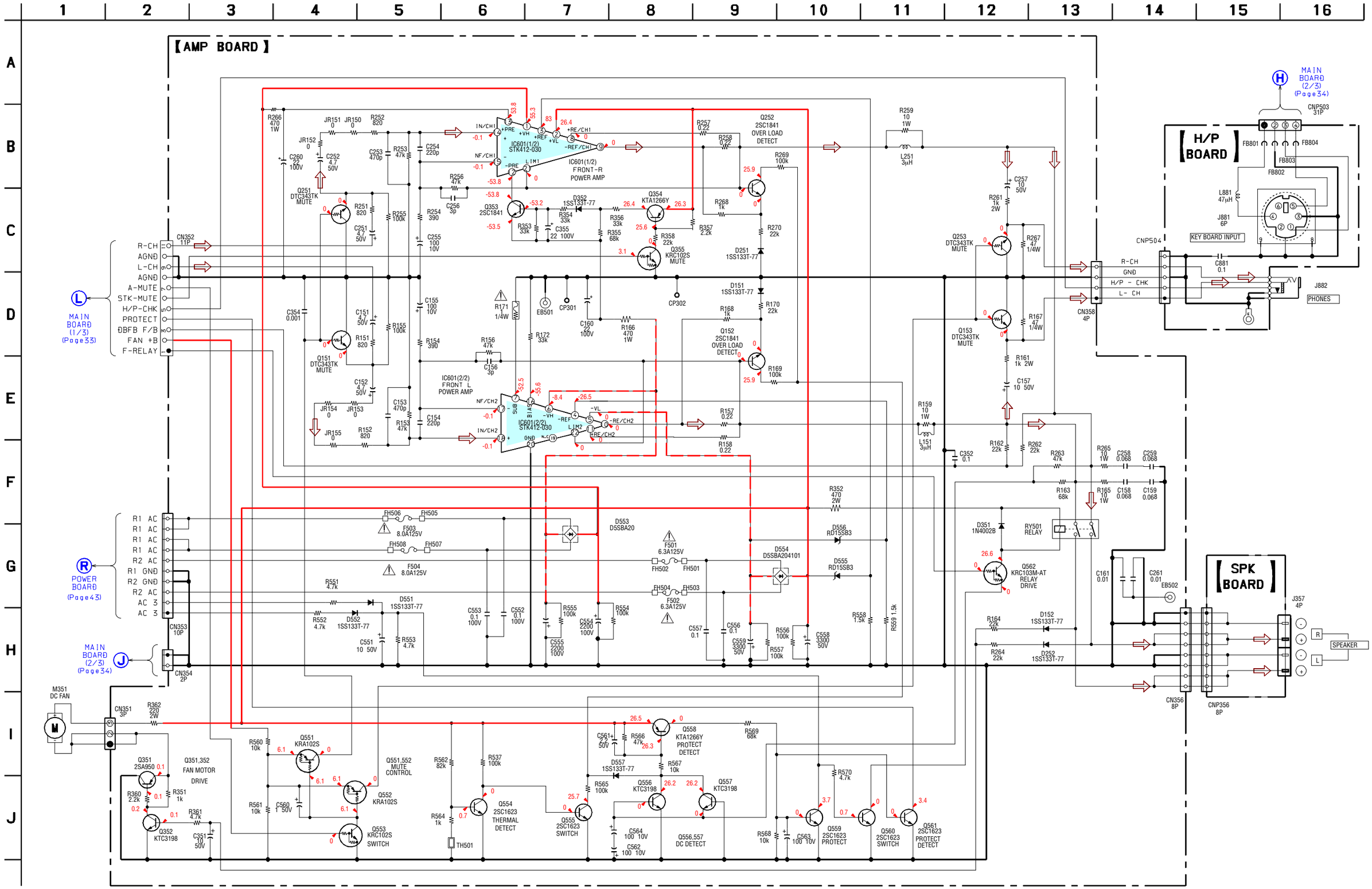
• See page 22 for Circuit Boards Location.



• **Semiconductor Location**

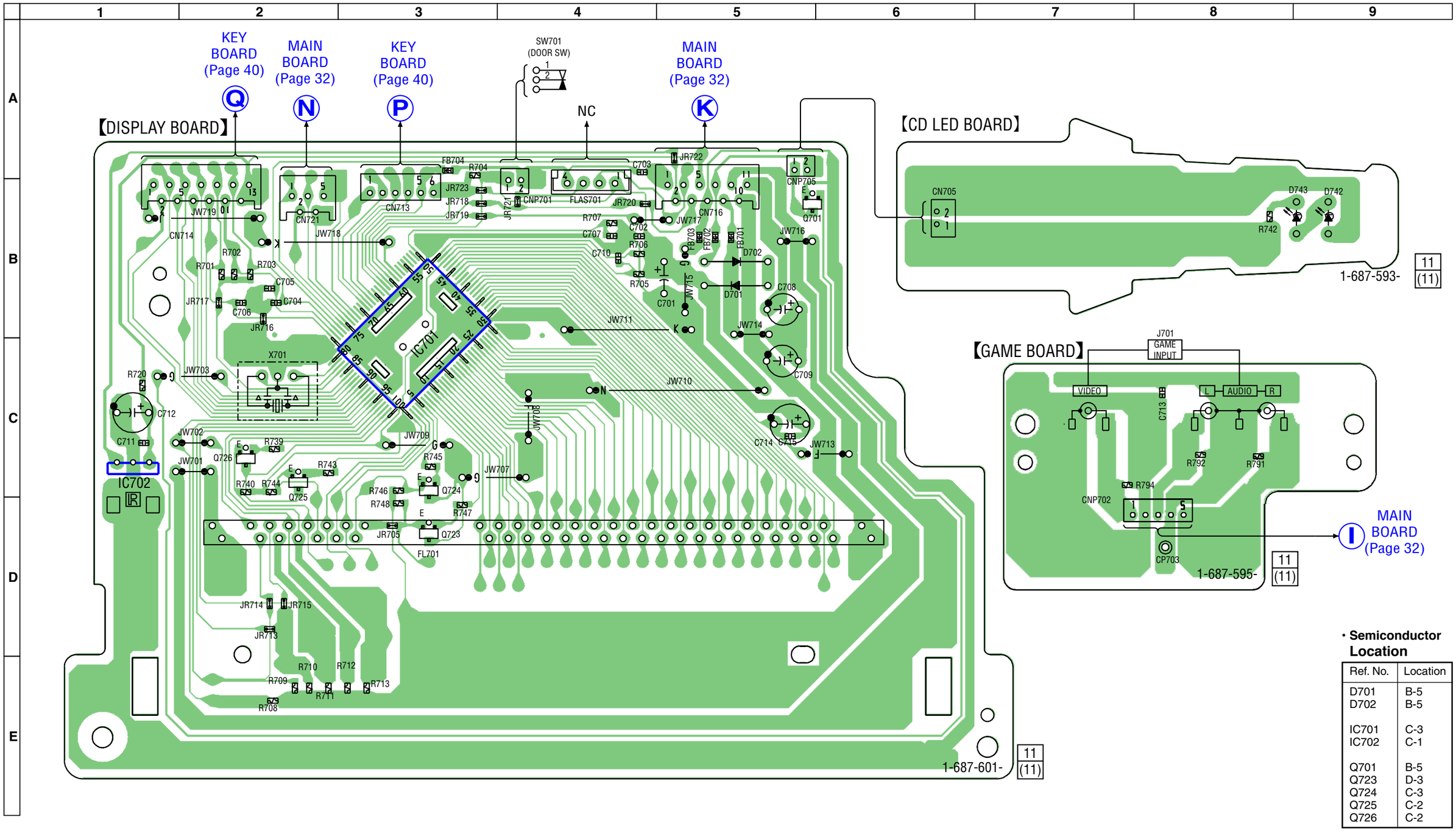
Ref. No.	Location
D151	F-4
D152	C-6
D251	F-4
D252	C-6
D351	C-6
D352	H-7
D551	E-9
D552	E-9
D553	D-7
D554	G-9
D555	D-2
D556	D-2
D557	C-9
IC601	E-2
Q151	H-7
Q152	E-4
Q153	B-7
Q251	H-7
Q252	E-4
Q253	B-7
Q351	C-7
Q352	C-7
Q353	G-7
Q354	G-7
Q355	G-8
Q551	H-10
Q552	I-10
Q553	H-10
Q554	C-9
Q555	C-9
Q556	B-10
Q557	C-10
Q558	C-9
Q559	G-10
Q560	G-10
Q561	F-10
Q562	G-9

7-12. Schematic Diagram – AMP Section –



7-13. Printed Wiring Board – DISPLAY Section –

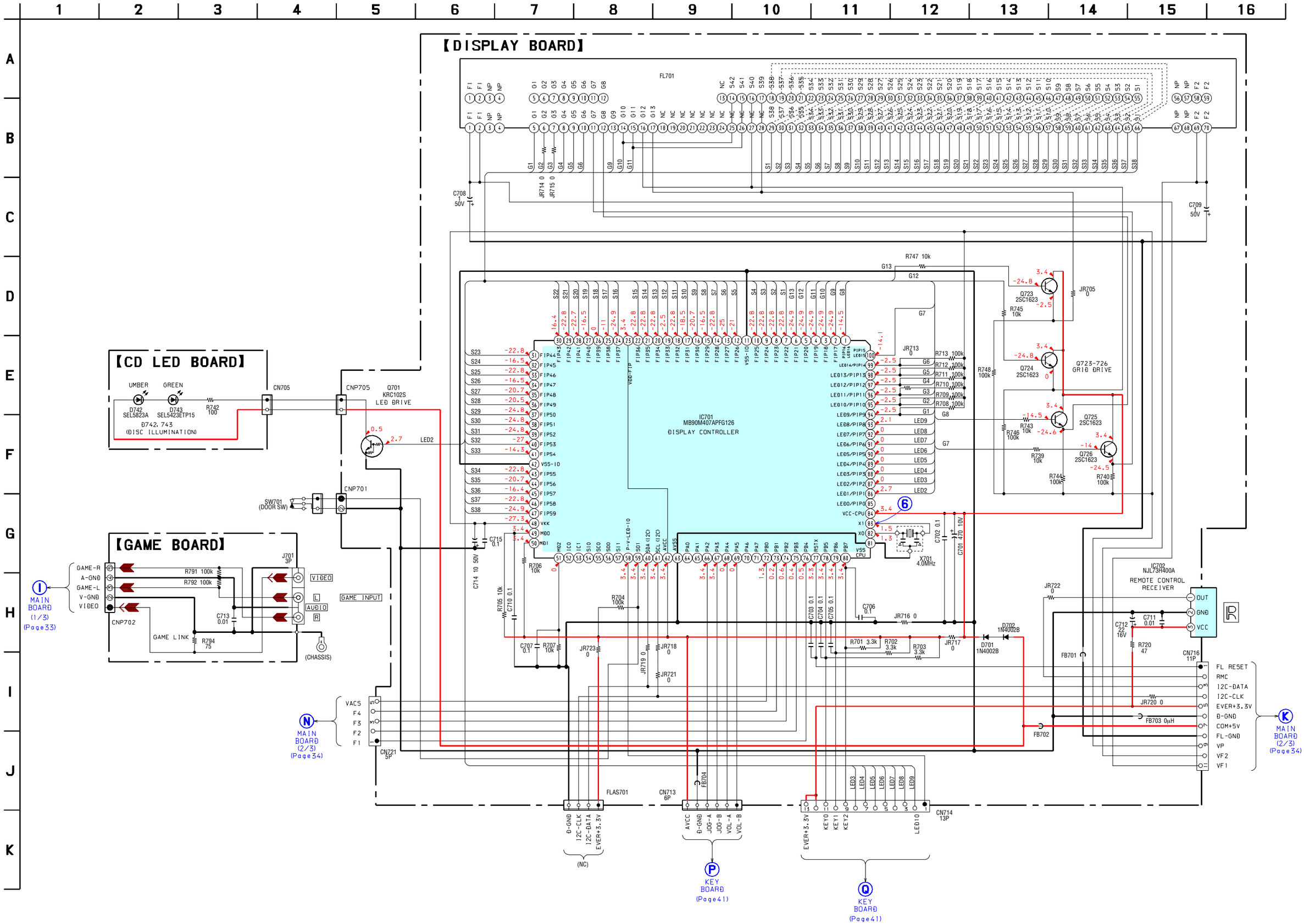
• See page 22 for Circuit Boards Location.



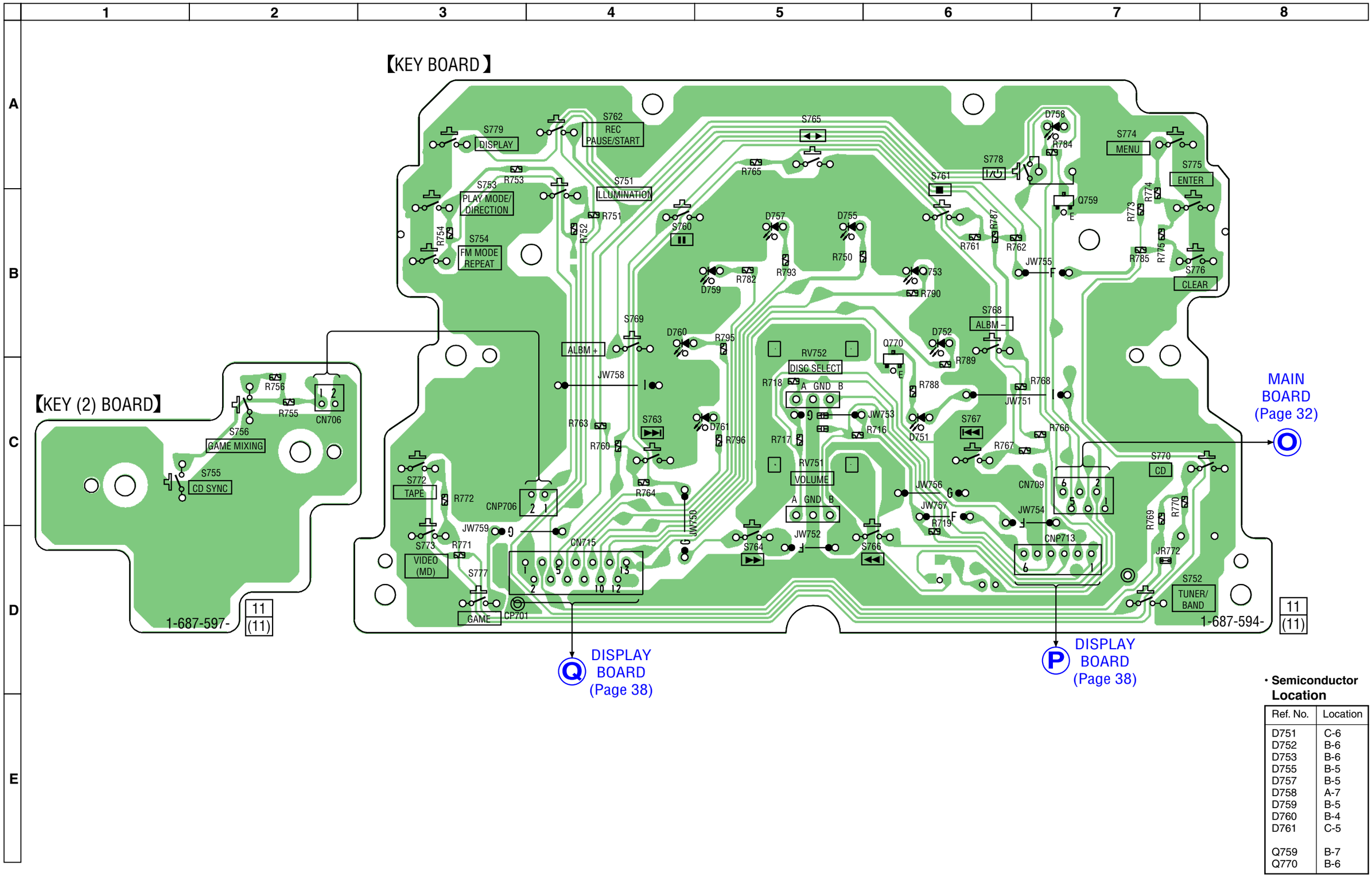
- **Semiconductor Location**

Ref. No.	Location
D701	B-5
D702	B-5
IC701	C-3
IC702	C-1
Q701	B-5
Q723	D-3
Q724	C-3
Q725	C-2
Q726	C-2

7-14. Schematic Diagram – DISPLAY Section – • See page 50 for IC Pin Function Description.



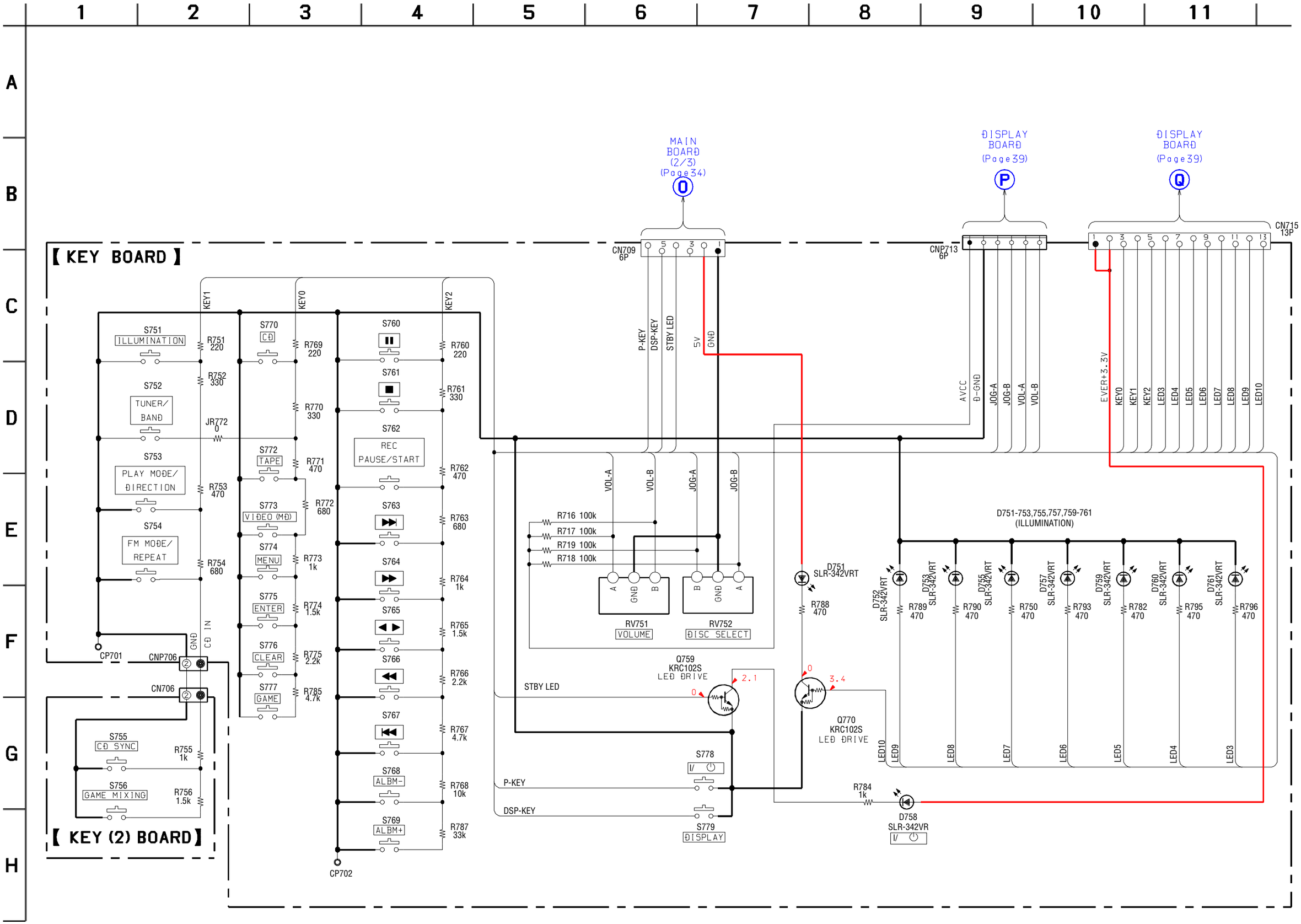
7-15. Printed Wiring Board – KEY Section – • See page 22 for Circuit Boards Location.



• **Semiconductor Location**

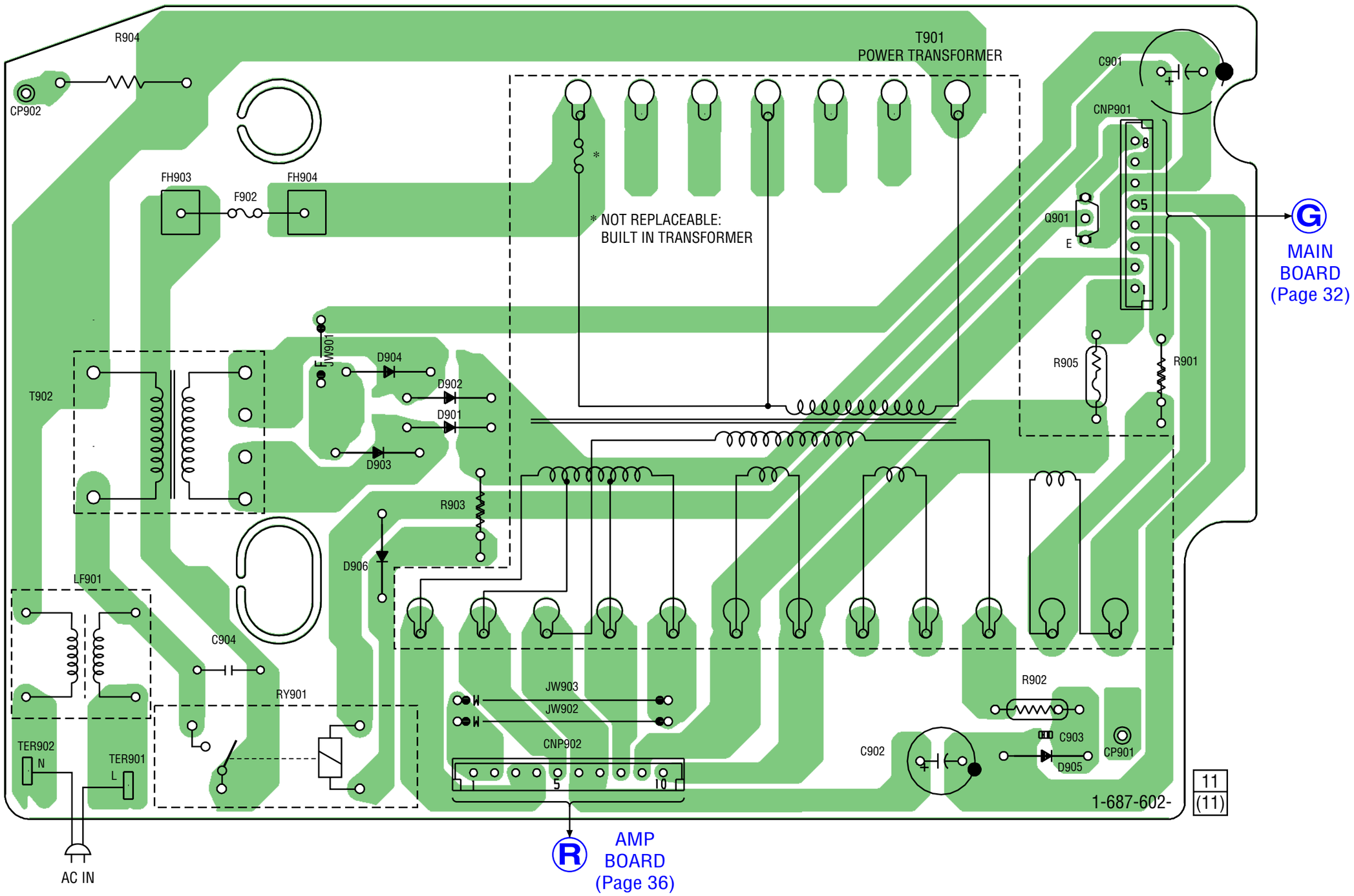
Ref. No.	Location
D751	C-6
D752	B-6
D753	B-6
D755	B-5
D757	B-5
D758	A-7
D759	B-5
D760	B-4
D761	C-5
Q759	B-7
Q770	B-6

7-16. Schematic Diagram – KEY Section –

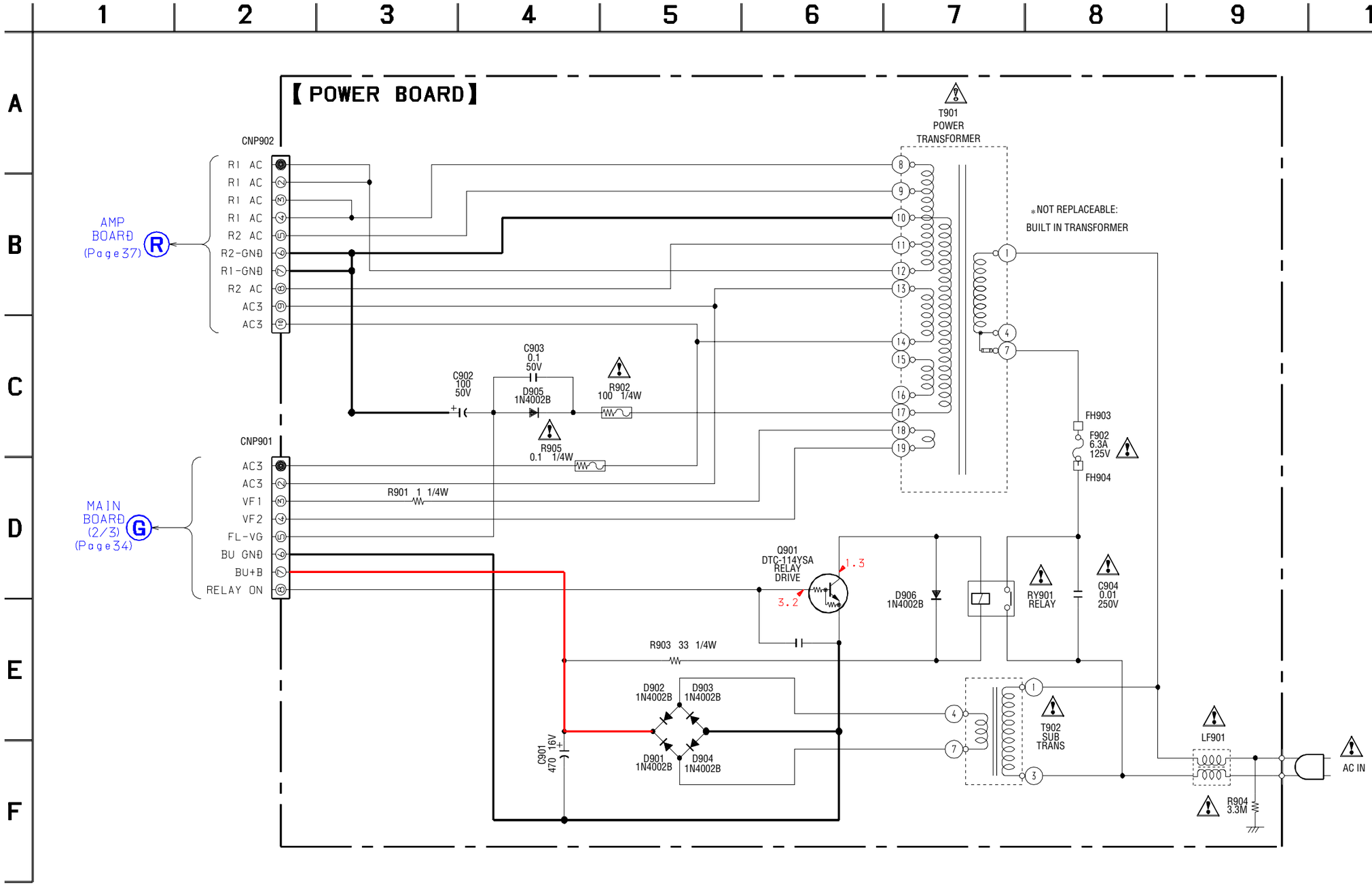


7-17. Printed Wiring Board – POWER Section – **• See page 22 for Circuit Boards Location.**

【POWER BOARD】



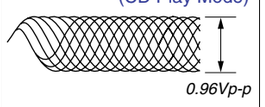
7-18. Schematic Diagram – POWER Section –



• **Waveforms**

– CD Board –

① IC101 ㊿ (RFAC)
(CD Play Mode)

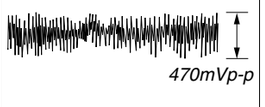


200mV/DIV, 1 µs/DIV

② IC101 ㊴ (FE)
(CD Play Mode)

100mV/DIV, 200 µs/DIV

③ IC101 ㊶ (TE)
(CD Play Mode)



100mV/DIV, 200 µs/DIV

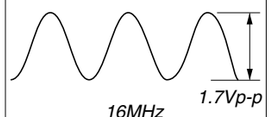
④ IC104 ㊸ (XI)

16.9MHz

0.5V/DIV, 20ns/DIV

– MAIN Board –

⑤ IC801 ⑬ (XOUT)

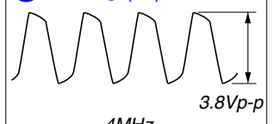


16MHz

0.5V/DIV, 40ns/DIV

– DISPLAY Board –

⑥ IC701 ㊽ (X1)



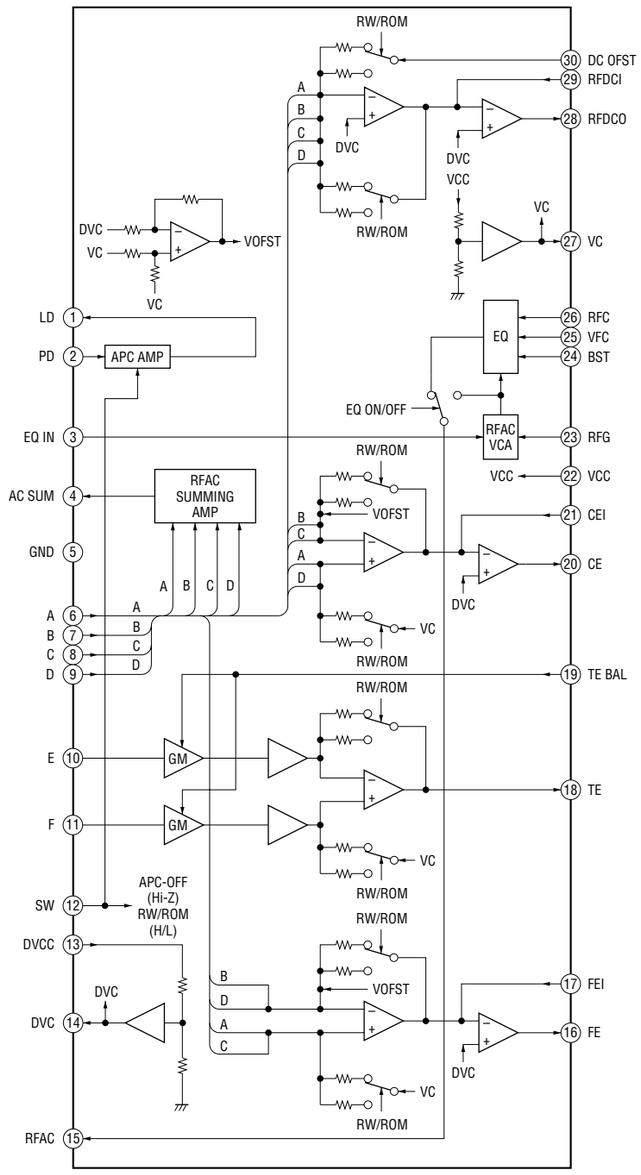
4MHz

1V/DIV, 100ns/DIV

7-19. IC Block Diagrams

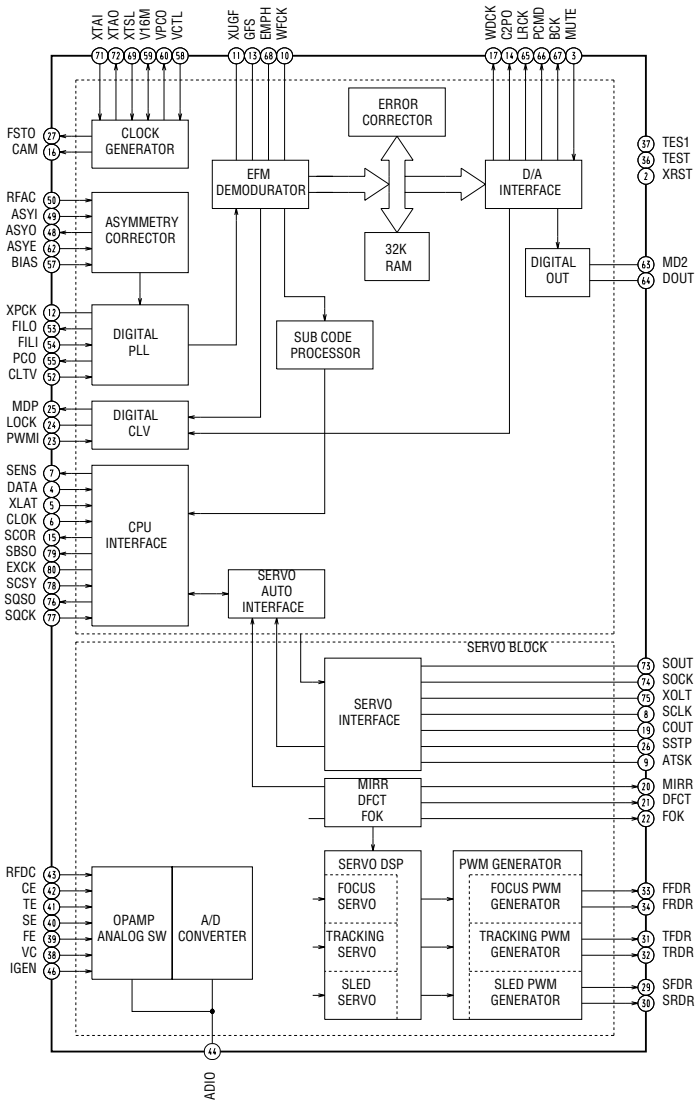
– CD Board –

IC103 CXA2581N-T4

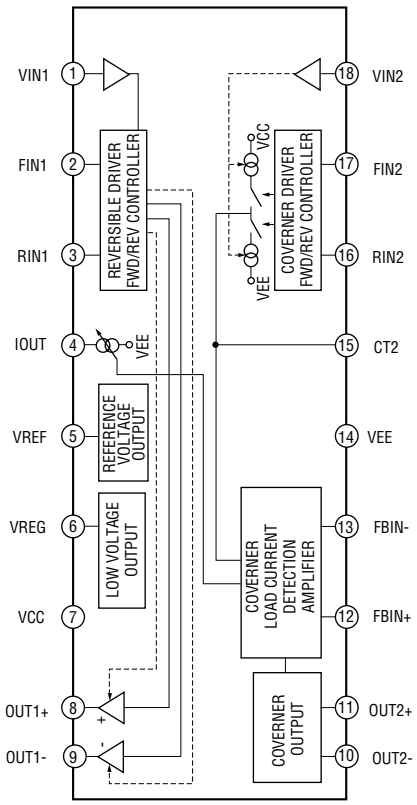


– MAIN Board –

IC101 CXD3068Q



IC401 BA6780



7-20. IC Pin Function Description

• IC104 TC94A20F-CX4 D/A Converter, MP3 Decoder (CD Board)

Pin No.	Pin Name	I/O	Description
1	RESET	I	Reset input terminal “L”: reset
2	MIMD	I	Microcomputer interface mode selection input “H”: I2C, “L”: TSB
3	MICS/AD0	I	Microcomputer interface chip select signal input
4	MILP/AD1	I	Microcomputer interface latch pulse input
5	MIDIO	I/O	Serial data input/output
6	MICK	I	Serial clock input
7	MIACK/AD2	O	Microcomputer interface acknowledge signal output
8	VDDT	–	Power supply (3.3V) for digital circuit
9	SDO	O	Data output (open)
10	BCKO/AD3	O	Bit output (open)
11	LRCKO/AD4	O	LR clock output (open)
12	SDI0	I	Data input 0
13	BCKIA	I	Bit clock input A
14	LRCKIA	I	LR clock input A
15	SDI1/AD5	I	Data input 1 (fixed at “L”)
16	BCKIB/CE	I	Bit clock input B (fixed at “L”)
17	LRCKIB/OE	I	LR clock input B (fixed at “L”)
18	VDD	–	Power supply (2.5V) for digital circuit
19	STANDBY	I	Standby mode control signal input “H”: STB, “L”: normal (fixed at “L”)
20	VSS	–	Ground for digital circuit
21	VSSL	–	Ground for DAC Lch
22	VRAL	–	Reference voltage terminal for DAC Lch
23	LO	O	DAC Lch signal output
24	VDAL	–	Power supply (2.5V) for DAC Lch
25	VDAR	–	Power supply (2.5V) for DAC Rch
26	RO	O	DAC Rch signal output
27	VRAR	–	Reference voltage terminal for DAC Rch
28	VSSR	–	Ground for DAC Rch
29	TESTP	I	Terminal for test “H”: test mode, “L”: normal (fixed at “L”)
30	CSK	O	SPDIF signal output (open)
31 to 34	PO0/AD12 to PO3/AD09	O	General purpose output (open)
35	VDDT	–	Power supply (3.3V) for digital circuit
36	PO4/AD8	O	General purpose output (open)
37	PO5/AD7	O	General purpose output (open)
38	PO6/AD6	O	General purpose output (open)
39	PO7	O	Interrupt request signal output to the system control (IC801)
40	VSS	–	Ground for digital circuit
41	FI0/AD13	I	External interrupt signal input (fixed at “L”)
42	FI1/AD14/VDDM	–	Power supply (2.5V) for the internal 1Mbit SRAM
43	FI2/WR	I	Flag signal input 0 (fixed at “L”)
44	FI3/AD16	I	Flag signal input 1 (fixed at “L”)
45	VSSM	–	Ground for the internal 1Mbit SRAM
46, 47	PI0, PI1	I	General purpose input (fixed at “L”)
48	VSS	–	Ground for digital circuit
49, 50	PI2/IO2, PI3/IO3	I	General purpose input (fixed at “L”)
51	PI4/IO4	I	General purpose input (fixed at “L”)
52	VDD	–	Power supply (2.5V) for digital circuit
53	PI5/IO5	I	General purpose input/SUBQ interface data input (fixed at “L”)
54	BOOT/IO6	I	Terminal for test/SUBQ interface frame sync input (fixed at “L”)
55	TXO/IO7	I	Flag signal input 2/SUBQ interface block sync input (fixed at “L”)

Pin No.	Pin Name	I/O	Description
56	VSSP	–	Ground for VCO circuit
57	PDO	O	PLL phase error detection signal output
58	VCOI	I	VCO control voltage input
59	VDDP	–	Power supply (2.5V) for VCO circuit
60	CKO	O	External clock output
61	VDDX	–	Power supply (2.5V) for oscillation circuit
62	XI	I	Resonator terminal (input)
63	XO	O	Resonator terminal (output)
64	VSSX	–	Ground for oscillation circuit

• IC801 M30624MGN-A16FP System Controller (MAIN Board)

Pin No.	Pin Name	I/O	Description
1	TABLE POS	O	Table motor control signal output to the motor driver (IC401)
2	LOAD POS	O	Loading motor control signal output to the motor driver (IC401)
3	LOAD NEG	O	Loading motor control signal output to the motor driver (IC401)
4	RMC	I	Remote control signal input from the remote control receiver (IC702)
5	MP3-DO	O	MP3 serial data output
6	MP3-DI	I	MP3 serial data input
7	MP3-SCL	O	MP3 serial clock output
8	(BYTE)	–	Not used (fixed at “L”)
9	(CNVSS)	–	Not used
10	SUBXIN	I	Sub system clock input (32.768kHz)
11	SUBXOUT	O	Sub system clock output (32.768kHz)
12	RESET	I	System reset signal input from the reset signal generator (IC802)
13	XOUT	O	Sysem clock output (16MHz)
14	VSS	–	Ground
15	XIN	I	System clock input (16MHz)
16	VCC	–	Power supply
17	NC(NMI)	I	Not used (fixed at “H”)
18	MP3-REQ	I	MP3 request signal intput
19	C-SCOR	I	Sub-code sync detection signal input from the CXD3068Q (IC101)
20	KB-SCL	I	Serial data transfer clock signal input from the KEYBOARD (J881)
21	C-XRST	O	Reset signal output to the CXD3068Q (IC101)
22	PWM1	O	Focus servo drive PWM signal output to the CXA2581N (IC103)
23	C-XLAT	O	Latch signal output to the CXD3068Q (IC101)
24	PWM2	O	PWM signal output to the CXA2581N (IC103)
25	LD ON	O	Laser diode on/off control signal output to the CXA2581N (IC103)
26	PWM3	O	RFDC PWM signal output to the CXA2581N (IC103)
27	C-SENSE	I	Internal status monitor input from the CXD3068Q (IC101)
28	C-DATA	O	Serial data output to the CXD3068Q (IC101)
29	I2C CLK	I/O	Communication data clock input or output with the display controller (IC701)
30	I2C DATA	I/O	Communication data bus with the display controller (IC701)
31	NC(TXD1)	I	Not used (open)
32	C-SQSO(RXD1)	I	Subcode Q data input from the CXD3068Q (IC101)
33	C-SQCK(SCLK)	O	Subcode Q reading clock output to the CXD3068Q (IC101)
34	MP3-LATCH(RTS1)	O	MP3 latch signal output
35	C-CLK	O	Serial data transfer clock output to the CXD3068Q (IC101)
36	KB-SDA	I	Keyboard data input from the KEYBOARD (J881)
37	KB-CTRL	O	Keyboard control signal output to the KEYBOARD (J881)
38	CD ON	O	CD power on/off control signal output “H” : CD on
39	TEST-CLK	O	Not used (open)
40	TU-ON	O	FM on/off control signal output “H” : FM on
41	NC(XHOLD)	I	Not used
42	TU-CE	O	Chip enable signal output to the tuner pack
43	TU-DO	O	Serial data output to the tuner pack
44	TU-CLK	O	Serial data trnasfer clock output to the tuner pack
45	TU-DI	I	Serial data input from the tuner pack
46	NC(XWR)	I	Not used
47	TU-TUNED	I	Tuning detection signal input from the tuner pack “L” : tuned, “H” : detuned
48	SURCE SEL-A	O	Input selector control signal output (Not used)
49	SURCE SEL-B	O	Input selector control signal output (Not used)
50	P_TRANS_RESET	O	Transmiter reset signal output (Not used)

Pin No.	Pin Name	I/O	Description
51	PL-DATA	O	Serial data output to the PROLOGIC IC (Not used)
52	PL-CLK	O	Serial clock ouput to the PROLOGIC IC (Not used)
53	PL-RQ	O	Request signal output to the PROLOGIC IC (Not used)
54	VOL-CLK	O	Clock output to the VOLUME IC (IC301)
55	VOL-DATA	O	Data output to the VOLUME IC (IC301)
56	REC-MUTE	O	Tape recording muting control signal output "L" : muting on
57	PB-MUTE	O	Tape line muting control signal output
58	REC/PB	O	REC/PB selection control signal output "H" : REC, "L" : PB
59	ALC-ON	O	ALC control signal output
60	MO-ON	O	Capstan motor on/off control signal output
61	SOL-ON	O	Deck trigger solenoid control signal output
62	VCC	–	Power supply
63	TA-PLAY	I	Detection signal input from the deck play detect switch
64	VSS	–	Ground
65	MULTI ROOM-A	O	Front/rear/surround selection signal output (Not used)
66	MULTI ROOM-B	O	Front/rear/surround selection signal output (Not used)
67	A-MUTE	O	Audio muting control signal output "H" : muting on
68	$\overline{\text{STK-MUTE}}$	O	Power amplifier muting control signal output "L" : power amplifier muting on
69	H/P CHK	I	Headphone detection signal input "H" : headphone on
70	PROTECT	I	Speaker protection signal input
71	R-MUTE	O	Rear speaker muting control signal output (Not used)
72	P-TRANS_LED	O	Transmitter LED drive signal output (Not used)
73	POWER KEY	I	Key signal input from the POWER key (S778)
74	DISPLAY KEY	I	Key signal input from the DISPLAY key (S779)
75	AC-CUT	I	AC off detection signal from the reset signal generator (IC802)
76	F-RELAY	O	Front speaker relay on/off control signal output
77	$\overline{\text{R-ST/BY}}$	O	Rear speaker relay control signal output (Not used)
78	ST/BY LED	O	Standby LED control signal output
79	FL-RESET	O	Reset signal output to the display ccontroller (IC701)
80	GAME LED	O	GAME LED control signal output (Not used)
81	MP3 ACK	I	MP3 acknowledge signal input
82	P-ST/BY	O	Standby relay control signal output
83	DVD ON	O	Not used
84	MP3-RESET	O	MP3 reset signal output
85	MP3-ST/BY	O	MP3 standby signal output Not used
86	$\overline{\text{LOAD IN SW}}$	I	Load in detection signal input from the LOAD switch (S842)
87	$\overline{\text{LOAD OUT SW}}$	I	Load out detection signal input from the LOAD switch (S842)
88	T-SENSE2	I	Detection signal input from the table position sensor
89	TA-SHUT	I	Shut off detection signal input from the reel pulse detector in the tape mechanism deck section
90	TA-HALF	I	Detection signal input from the cassette detect switch in the tape mechanism deck section
91	T-SENS3	I	Detection signal input from the table position sensor
92	D-SENSE	I	Detection signal input from the disc detect sensor "H" : disc in
93	T-SENS1	I	Detection signal input from the table position sensor
94	SPEC	I	Model specification setting teminal
95	MODEL	I	Model destination setting terminal
96	AVSS	–	Ground (analog)
97	MP3-CS	O	MP3 chip select signal output
98	VREF	–	Reference voltage input terminal (for A/D converter)
99	AVCC	–	Power supply (analog)
100	TABLE-NEG	O	Table motor control signal output to the motor driver

• IC701 MB90M407APF-G-126-BND Display Controller (DISPLAY Board)

Pin No.	Pin Name	I/O	Description
1	LED16/PIP16	O	Grid drive signal output to the fluorescent indicator tube (FL701)
2 to 6	FIP17 to FIP21	O	Grid drive signal output to the fluorescent indicator tube (FL701)
7 to 10	FIP22 to FIP25	O	Segment drive signal output to the fluorescent indicator tube (FL701)
11	VSS-IO	–	Ground
12 to 22	FIP26 - 36	O	Segment drive signal output to the fluorescent indicator tube (FL701)
23	VDD-FIP	–	Power supply
24 to 41	FIP37 - 54	O	Segment drive signal output to the fluorescent indicator tube (FL701)
42	VSS-IO	–	Ground
43 to 47	FIP55 - 59	O	Segment drive signal output to the fluorescent indicator tube (FL701)
48	VKK	–	Power supply (-30V) (for fluorescent indicator tube drive)
49 to 51	MD0 - 2	I	Operation mode setting input
52,53	IC0, 1	–	Not used (open)
54	SI0	–	Not used (open)
55	SC0	–	Not used (open)
56	SO0	–	Not used (open)
57	SI1	–	Not used (open)
58	P-V-LED-10	–	LED drive signal output
59	SO1	I	CD lid open/close detect switch signal input
60	SDA(I2C)	I/O	Communication bus with the system controller (IC801)
61	SCL(I2C)	I/O	Data communication clock input or output with the system controller (IC801)
62	AVCC	–	Power supply (analog)
63	AVSS	–	Ground (analog)
64, 65	PA0, 1	–	Not used (open)
66	PA2	I	Jog dial A signal input from the rotary encoder (RV752)
67	PA3	I	Jog dial B signal input from the rotary encoder (RV752)
68	PA4	I	Volume A signal input from the rotary encoder (RV751)
69	PA5	I	Volume B signal input from the rotary encoder (RV751)
70	PA6	I	L-ch level signal input Not used (open)
71	PA7	I	R-ch level signal input Not used (open)
72 to 76	PB0 - 4	I	Level signal input
77	RSTX	I	Reset signal input from the system controller (IC801)
78	PB5	I	Key signal input from the function key
79	PB6	I	Key signal input from the function key
80	PB7	I	Key signal input from the function key
81	VSS-CPU	–	Ground
82	X0	I	System clock input (4MHz)
83	X1	O	System clock output (4MHz)
84	VCC-CPU	–	Power supply
85	LED0/PIP0	O	Not used (open)
86 to 93	LED1 to 8/PIP1 to 8	O	LED drive signal output
94 to 100	LED9 -15/PIP9 -15	O	Grid drive signal output to the fluorescent indicator tube (FL701)

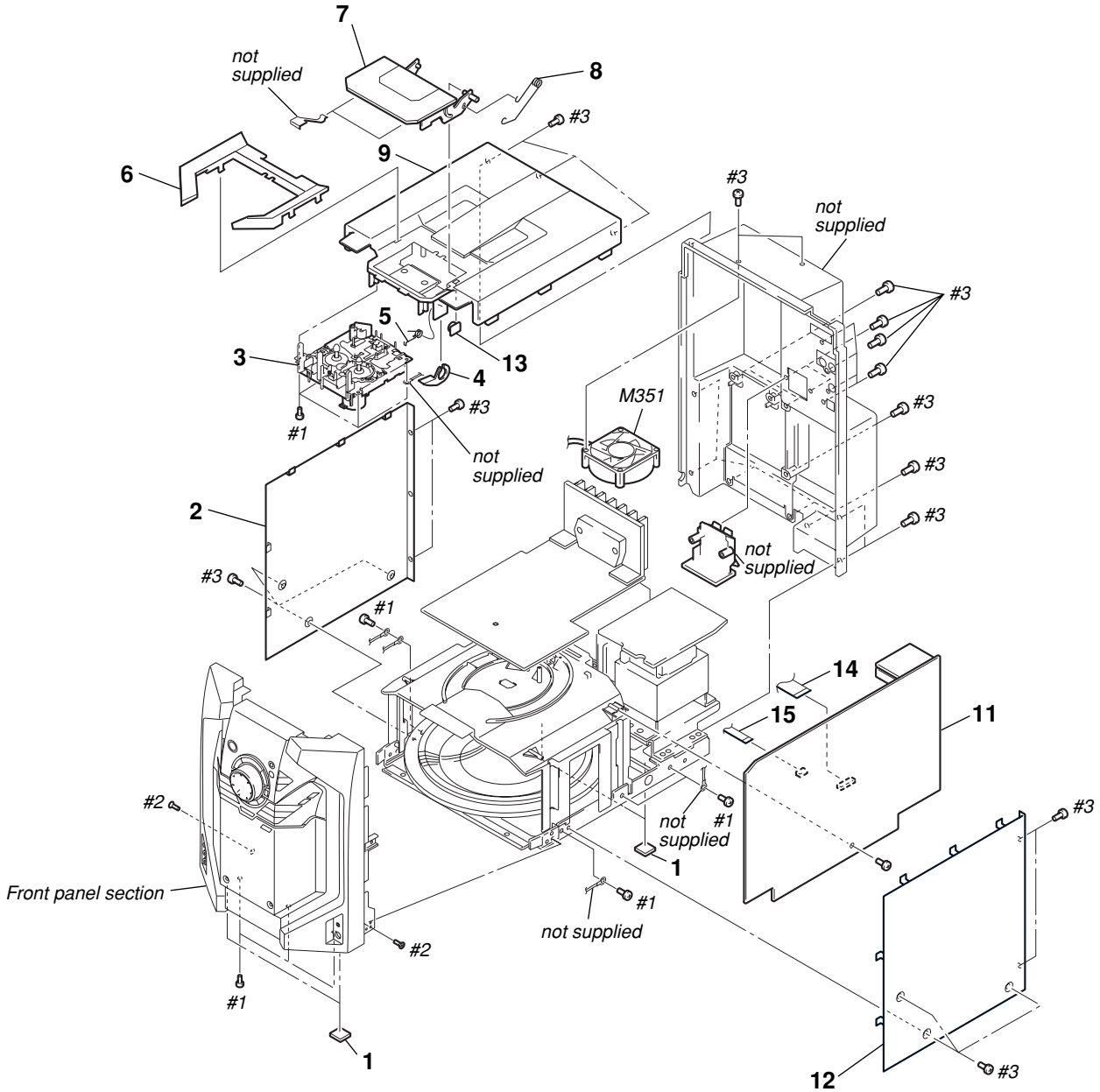
SECTION 8
EXPLODED VIEWS

NOTE:

- -XX, -X mean standardized parts, so they may have some differences from the original one.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.

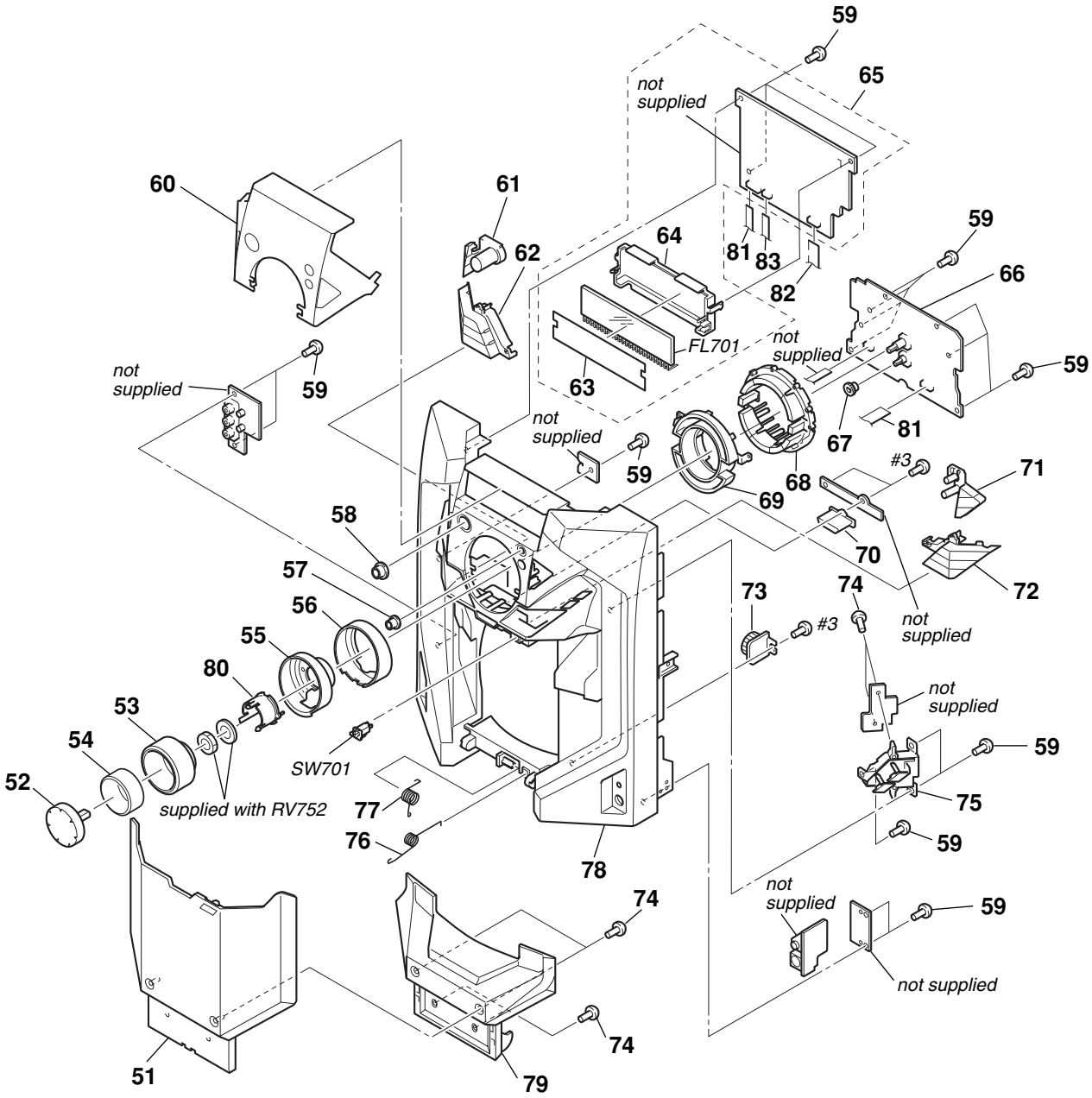
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.
Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

8-1. GENERAL SECTION



Ref. No.	Part No.	Description	Remark
1	4-247-507-01	FOOT, RUBBER	
2	4-238-222-01	PANEL (L), SIDE	
3	1-796-351-41	DECK, MECHANICAL (CMAL1Z234A)	
4	4-231-824-01	CAM (A), HEART	
5	4-231-836-01	SPRING (HEART CAM-A)	
6	4-244-572-01	PLATE,DECORATION	
7	4-244-573-11	HOLDER,CASSETTE	
8	4-244-574-01	SPRING, CASSETTE	
9	4-244-571-01	CABINET,TOP	
11	A-4732-592-A	MAIN BOARD COMPLETE	
12	4-238-223-01	PANEL (R), SIDE	
13	4-224-104-41	DAMPER	
14	1-590-218-11	WIRE (FLAT TYPE) (11 CORE)	
15	1-824-103-11	WIRE (FLAT TYPE) (8 CORE)	
M351	1-763-697-21	DC FAN	
#1	7-685-646-79	SCREW +BVTP 3X8 TYPE2 N-S	
#2	7-685-246-19	SCREW +KTP 3X8 TYPE2 SLIT	
#3	7-685-647-79	SCREW +BVTP 3X10 TYPE2 N-S	

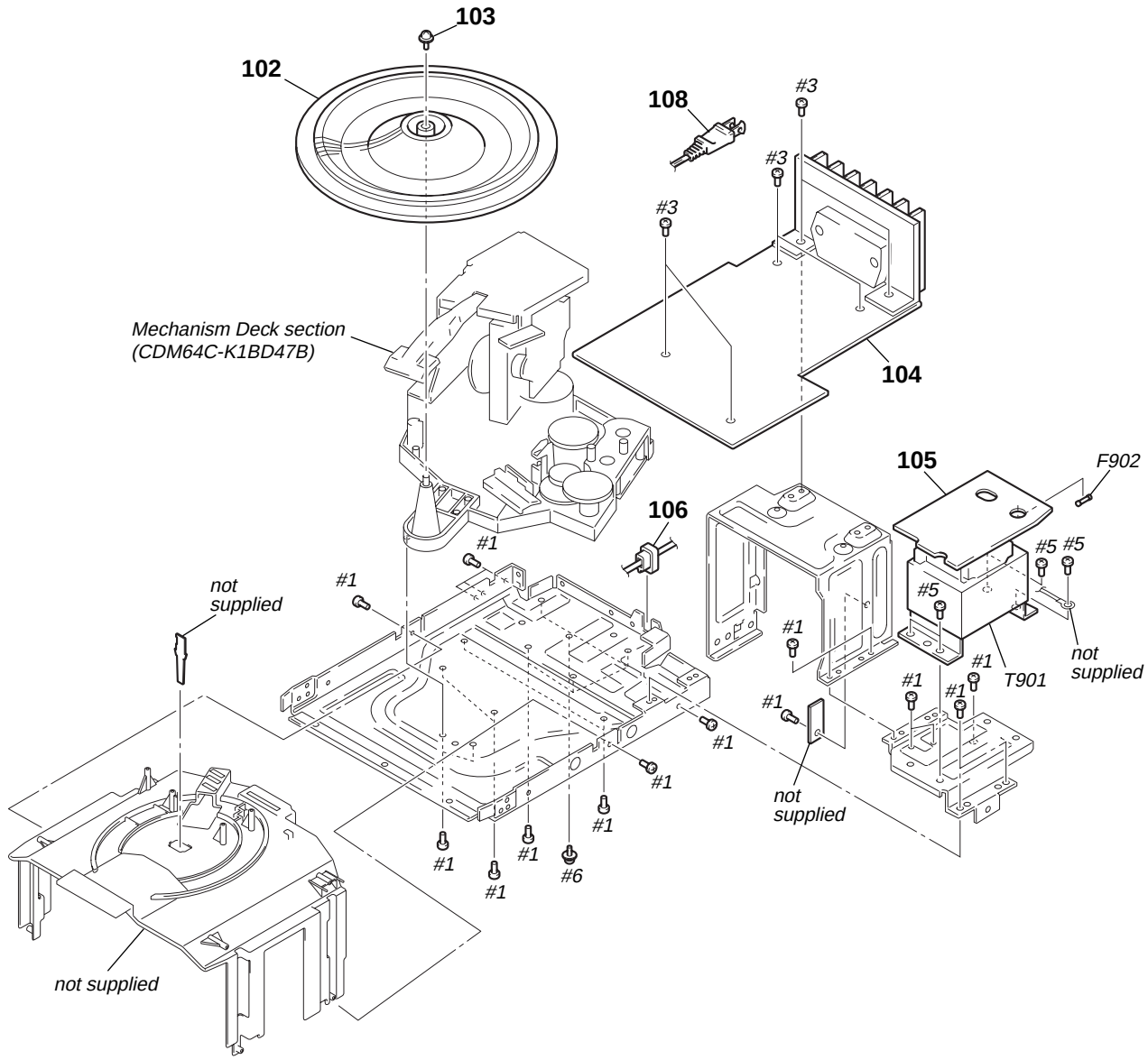
8-2. FRONT PANEL SECTION



Ref. No.	Part No.	Description	Remark
51	4-244-590-11	LID,CD(FRONT)	
52	4-244-589-01	KNOB,DISC	
53	4-244-588-01	KNOB,VOLUME	
54	4-245-426-01	RUBBER,VOLUME	
55	4-244-585-01	COVER,VOLUME	
56	4-244-584-01	INDICATOR,VOLUME	
57	4-244-576-01	RING,REC	
58	4-244-577-01	RING ,POWER	
59	4-951-620-11	SCREW (2.6X10), +BVTP	
60	4-244-578-11	PANEL,DECORATION	
61	A-4736-552-A	POWER BUTTON ASSY	
62	4-244-582-01	BUTTON,CD	
63	4-238-846-01	SHEET FL (GS1)	
64	4-238-230-01	HOLDER FL	
65	A-4732-487-A	DISPLAY BOARD COMPLETE	
66	A-4732-480-A	KEY BOARD COMPLETE	
67	4-244-594-01	GEAR,DISC	
68	4-244-580-11	BUTTON,PLAY	

Ref. No.	Part No.	Description	Remark
69	4-244-579-01	RING,PLAY	
71	4-244-581-11	BUTTON,REC	
72	4-244-729-01	BUTTON,GAME	
73	3-049-782-31	DAMPER	
74	4-957-577-21	SCREW PTP WH (2.6X8) (DIA. 10)	
75	4-244-727-01	BUTTON CD SYNC	
76	4-244-586-01	SPRING,CD LID	
77	4-246-605-01	SPRING (A), CD	
78	4-244-575-11	CABINET,FRONT	
79	4-244-591-11	LID,CD(REAR)	
80	4-244-587-01	HOLDER,DISC	
81	1-696-656-11	WIRE (FLAT TYPE) (13 CORE)	
82	1-765-325-11	WIRE (FLAT TYPE) (11 CORE)	
83	1-769-856-11	WIRE (FLAT TYPE) (5 CORE)	
FL701	1-518-881-11	INDICATOR TUBE, FLUORESCENT	
SW701	1-692-960-11	SWITCH, PUSH (1 KEY) (DOOR SW)	
#3	7-685-647-79	SCREW +BVTP 3X10 TYPE2 N-S	

8-3. CHASSIS SECTION

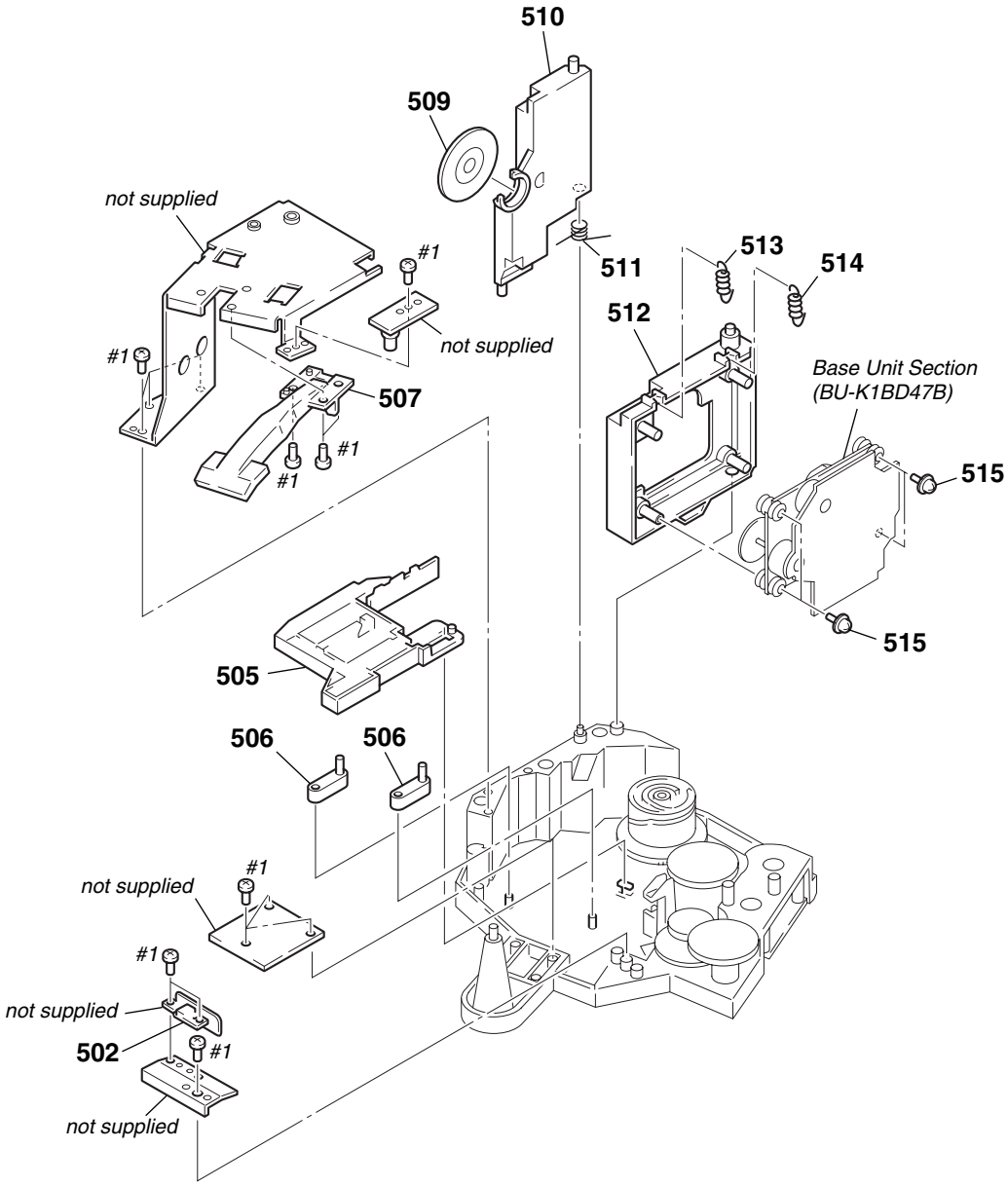


Ref. No.	Part No.	Description	Remark
102	4-231-311-02	TABLE (60)	
103	3-703-136-21	SCREW (M3X12)	
104	A-4732-488-A	AMP BOARD COMPLETE	
105	1-687-602-11	POWER BOARD	
106	3-703-244-00	BUSHING (2104), CORD	
⚠108	1-757-933-11	CORD, POWER	

Ref. No.	Part No.	Description	Remark
⚠F902	1-533-454-11	FUSE, GLASS TUBE (DIA. 5)	
⚠T901	1-439-648-11	TRANSFORMER, POWER	
#1	7-685-646-79	SCREW +BVTP 3X8 TYPE2 N-S	
#3	7-685-647-79	SCREW +BVTP 3X10 TYPE2 N-S	
#5	7-685-659-71	SCREW +BVTP 4X8 TYPE2 IT-3	
#6	7-682-947-01	SCREW +PSW 3X6	

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

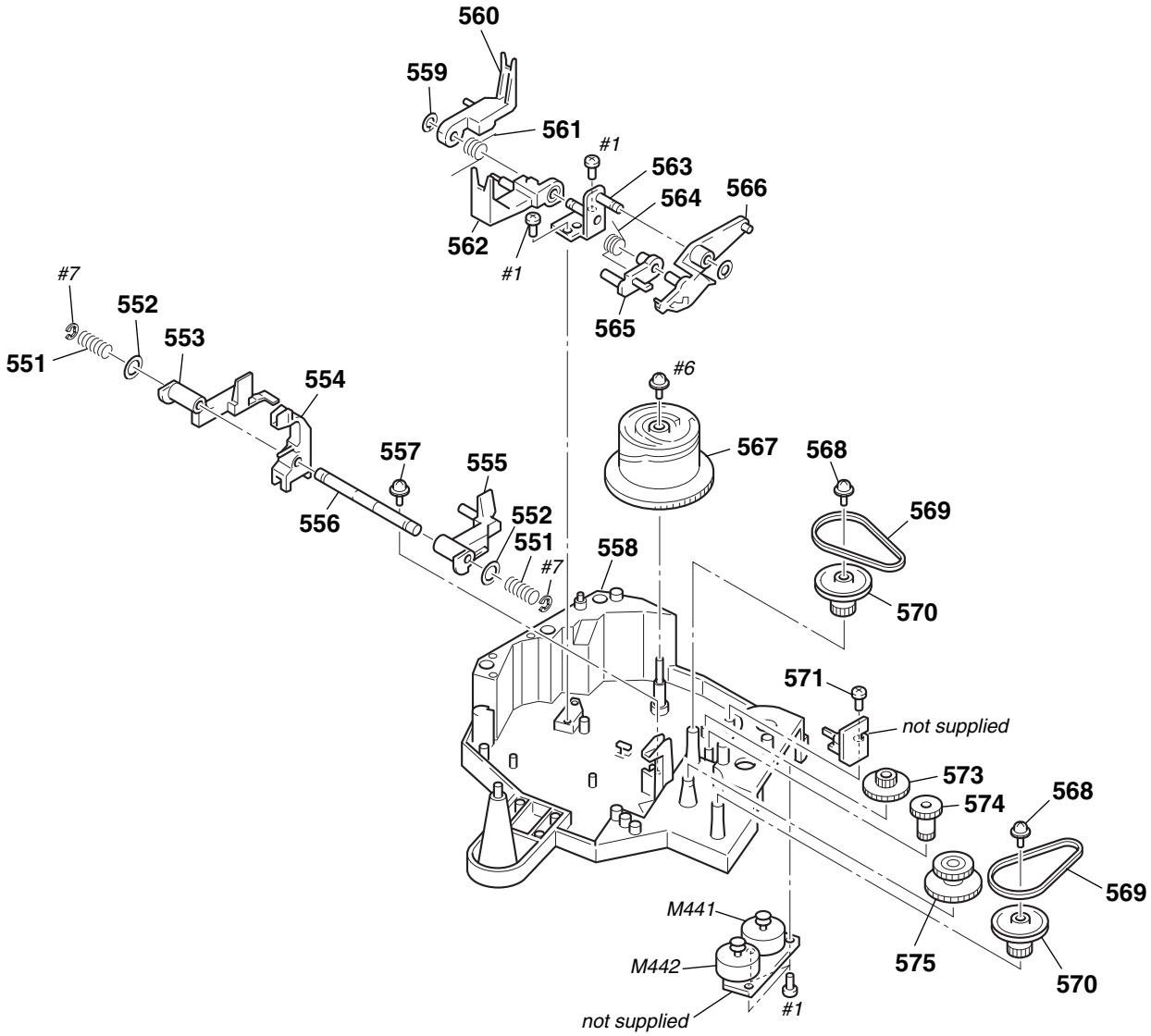
8-4. MECHANISM DECK SECTION-1 (CDM64C-K1BD47B)



Ref. No.	Part No.	Description	Remark
* 502	4-976-474-01	HOLDER (P-T)	
505	4-231-310-01	SLIDER (60)	
506	4-216-062-01	LEVER (FULCRUM)	
507	4-216-088-02	GUIDE (DISC)	
509	A-4723-324-A	MAGNET ASSY	
510	4-216-082-01	HOLDER (MAGNET), TORSION	

Ref. No.	Part No.	Description	Remark
511	4-216-081-01	SPRING (MG), TORSION	
512	X-4950-901-5	HOLDER ASSY, BU	
513	4-216-085-01	SPRING (F-1), TENSION	
514	4-216-086-01	SPRING (F-2), TENSION	
515	4-957-577-21	SCREW PTP WH (2.6X8) (DIA. 10)	
#1	7-685-646-79	SCREW +BVTP 3X8 TYPE2 N-S	

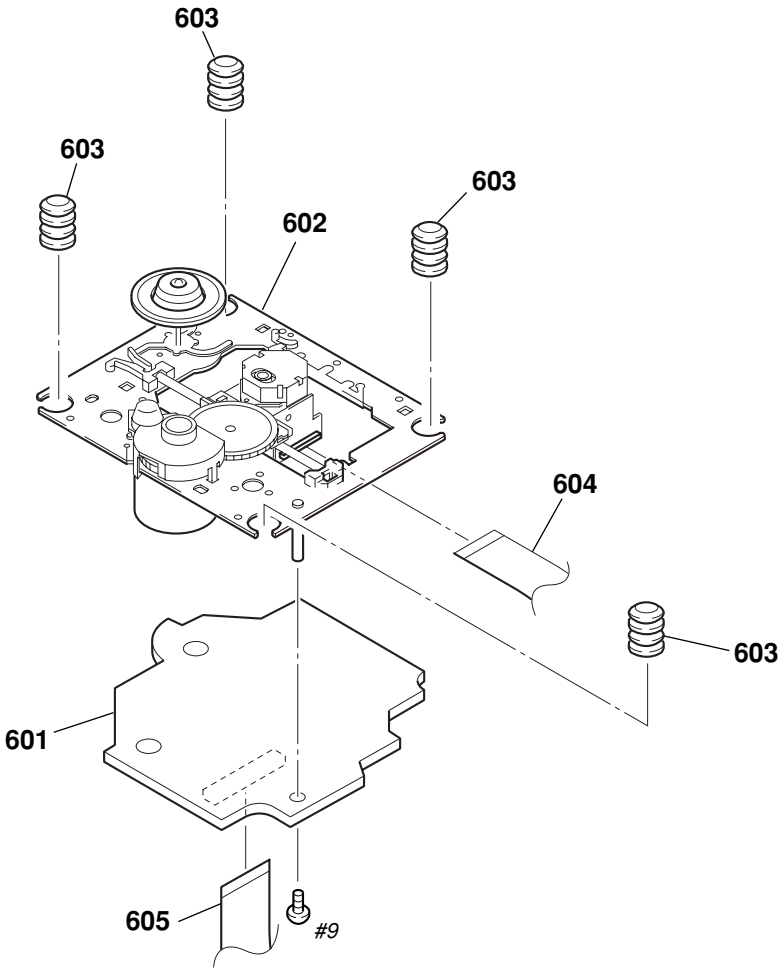
8-5. MECHANISM DECK SECTION-2 (CDM64C-K1BD47B)



Ref. No.	Part No.	Description	Remark
551	4-216-067-01	SPRING (CLAMP), COMPRESSION	
552	3-701-441-21	WASHER	
553	X-4954-587-1	HOLDER (DISC-L) ASSY	
554	4-231-313-01	LEVER (LOCK 60)	
555	X-4954-586-1	HOLDER (DISC-R) ASSY	
556	4-216-066-02	SHAFT (CLAMP)	
557	4-998-716-01	SCREW, BU FITTING	
558	4-231-312-01	BASE (CDM 60)	
559	3-325-697-01	WASHER	
560	4-216-076-01	HOLDER (R)	
561	4-216-077-01	SPRING (HOLDER FR), TORSION	
562	4-225-871-03	HOLDER (F400)	
563	X-4950-900-1	BRACKET (LEVER) ASSY	
564	4-216-080-01	SPRING (LIMITTER), TORSION	
565	4-216-079-02	LIMITTER (LEVER)	

Ref. No.	Part No.	Description	Remark
566	4-216-078-01	LEVER (LOADING)	
567	A-4672-676-B	CAM ASSY	
568	4-933-134-21	SCREW (+PTPWH M2.6X10)	
569	4-231-326-01	BELT (60)	
570	4-231-316-01	PULLEY (60)	
571	4-951-620-01	SCREW (2.6X8), +BVTP	
573	4-216-057-01	GEAR (CENTER 2)	
574	4-231-315-01	GEAR (CENTER 60)	
575	4-231-314-01	GEAR (TABLE 60)	
M441	A-4735-051-A	MOTOR (60) ASSY (LOADING)	
M442	A-4735-051-A	MOTOR (60) ASSY (TABLE)	
#1	7-685-646-79	SCREW +BVTP 3X8 TYPE2 N-S	
#6	7-682-947-01	SCREW +PSW 3X6	
#7	7-624-106-04	STOP RING 3.0, TYPE -E	

8-6. BASE UNIT SECTION (BU-K1BD47B)



Ref. No.	Part No.	Description	Remark
601	A-4734-813-A	CD MOUNTED PC BOARD (A)	
⚠602	A-3328-818-A	DEVICE,OPTICAL (KSM-213BFN)	
603	4-992-054-11	RUBBER, VIBRATION PROOF	
604	1-782-817-11	WIRE (FLAT TYPE) (16 CORE)	
605	1-824-104-11	WIRE (FLAT TYPE) (29 CORE)	
#9	7-621-255-32	SCREW +P 2X5	

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

SECTION 9
ELECTRICAL PARTS LIST

AMP

NOTE:

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX, -X mean standardized parts, so they may have some difference from the original one.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- CAPACITORS:
  uF: µF
- COILS
  uH: µH
- RESISTORS
  All resistors are in ohms.
  METAL: metal-film resistor
  METAL OXIDE: Metal Oxide-film resistor
  F: nonflammable
- SEMICONDUCTORS
  In each case, u: µ, for example:
  uA...: µA... , uPA... , µPA... ,
  uPB... , µPB... , uPC... , µPC... ,
  uPD..., µPD...

When indicating parts by reference number, please include the board name.

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Les composants identifiés par une marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

Ref. No.	Part No.	Description				Remarks
	A-4732-488-A	AMP BOARD, COMPLETE				
		**********				
	7-685-646-79	SCREW +BVTP 3X8 TYPE2 N-S				
	7-685-650-79	SCREW +BVTP 3X16 TYPE2 IT-3				
		< CAPACITOR >				
C151	1-126-963-11	ELECT	4.7uF	20%	50V	
C152	1-126-963-11	ELECT	4.7uF	20%	50V	
C153	1-164-362-11	CERAMIC CHIP	470PF	5%	50V	
C154	1-162-957-11	CERAMIC CHIP	220PF	5%	50V	
C155	1-104-665-11	ELECT	100uF	20%	10V	
C156	1-162-934-11	CERAMIC CHIP	3PF	0.25PF	50V	
C157	1-126-964-11	ELECT	10uF	20%	50V	
C158	1-130-493-00	MYLAR	0.068uF	5%	50V	
C159	1-130-493-00	MYLAR	0.068uF	5%	50V	
C160	1-128-560-11	ELECT	22uF	20%	100V	
C161	1-101-004-00	CERAMIC	0.01uF		50V	
C251	1-126-963-11	ELECT	4.7uF	20%	50V	
C252	1-126-963-11	ELECT	4.7uF	20%	50V	
C253	1-164-362-11	CERAMIC CHIP	470PF	5%	50V	
C254	1-162-957-11	CERAMIC CHIP	220PF	5%	50V	
C255	1-104-665-11	ELECT	100uF	20%	10V	
C256	1-162-934-11	CERAMIC CHIP	3PF	0.25PF	50V	
C257	1-126-964-11	ELECT	10uF	20%	50V	
C258	1-130-493-00	MYLAR	0.068uF	5%	50V	
C259	1-130-493-00	MYLAR	0.068uF	5%	50V	
C260	1-128-560-11	ELECT	22uF	20%	100V	
C261	1-101-004-00	CERAMIC	0.01uF		50V	
C351	1-126-964-11	ELECT	10uF	20%	50V	
C352	1-165-319-11	CERAMIC CHIP	0.1uF		50V	
C354	1-164-357-11	CERAMIC CHIP	0.001uF	5%	50V	
C355	1-128-560-11	ELECT	22uF	20%	100V	
C551	1-126-964-11	ELECT	10uF	20%	50V	
C552	1-130-777-00	MYLAR	0.1uF	10%	100V	
C553	1-130-777-00	MYLAR	0.1uF	10%	100V	
C554	1-137-843-11	ELECT	2200uF	20%	100V	
C555	1-137-843-11	ELECT	2200uF	20%	100V	
C556	1-136-165-00	MYLAR	0.1uF	5%	50V	
C557	1-136-165-00	MYLAR	0.1uF	5%	50V	
C558	1-127-811-11	ELECT	3300uF	20%	50V	
C559	1-127-811-11	ELECT	3300uF	20%	50V	
C560	1-126-960-11	ELECT	1uF	20%	50V	
C561	1-126-961-11	ELECT	2.2uF	20%	50V	
C562	1-104-665-11	ELECT	100uF	20%	10V	
C563	1-104-665-11	ELECT	100uF	20%	10V	
C564	1-104-665-11	ELECT	100uF	20%	10V	

Ref. No.	Part No.	Description	Remarks
		< CONNECTOR >	
CN351	1-564-506-11	PLUG, CONNECTOR 3P	
CN352	1-568-830-11	CONNECTOR, FFC 11P	
* CN353	1-764-333-11	PLUG, CONNECTOR 10P	
CN354	1-564-505-11	PLUG, CONNECTOR 2P	
* CN356	1-564-511-11	PLUG, CONNECTOR 8P	
* CN358	1-564-706-11	PIN, CONNECTOR (SMALL TYPE) 4P	
		< DIODE >	
D151	8-719-991-33	DIODE 1SS133T-77	
D152	8-719-991-33	DIODE 1SS133T-77	
D251	8-719-991-33	DIODE 1SS133T-77	
D252	8-719-991-33	DIODE 1SS133T-77	
D351	8-719-063-79	DIODE 1N4002B	
D352	8-719-991-33	DIODE 1SS133T-77	
D551	8-719-991-33	DIODE 1SS133T-77	
D552	8-719-991-33	DIODE 1SS133T-77	
D553	8-719-500-60	DIODE D5SBA20	
D554	8-719-510-68	DIODE D5SBA204101	
D555	8-719-110-42	DIODE RD15ESB3	
D556	8-719-110-42	DIODE RD15ESB3	
D557	8-719-991-33	DIODE 1SS133T-77	
		< GROUND TERMINAL >	
EB501	1-537-770-21	TERMINAL BOARD, GROUND	
EB502	1-537-770-21	TERMINAL BOARD, GROUND	
		< FUSE >	
⚠F501	1-533-454-11	FUSE (6.3A 125V)	
⚠F502	1-533-454-11	FUSE (6.3A 125V)	
⚠F503	1-576-537-11	FUSE (8A 125V)	
⚠F504	1-576-537-11	FUSE (8A 125V)	
		< FUSE HOLDER >	
FH501	1-533-233-31	FUSE HOLDER	
FH502	1-533-233-31	FUSE HOLDER	
FH503	1-533-233-31	FUSE HOLDER	
FH504	1-533-233-31	FUSE HOLDER	
FH505	1-533-233-31	FUSE HOLDER	
FH506	1-533-233-31	FUSE HOLDER	
FH507	1-533-233-31	FUSE HOLDER	
FH508	1-533-233-31	FUSE HOLDER	
		< IC >	
IC601	8-749-017-04	IC STK412-030	

AMP

Ref. No.	Part No.	Description			Remarks
		< JUMPER RESISTOR >			
JR150	1-216-864-11	METAL CHIP	0	5%	1/10W
JR151	1-216-864-11	METAL CHIP	0	5%	1/10W
JR152	1-216-864-11	METAL CHIP	0	5%	1/10W
JR153	1-216-864-11	METAL CHIP	0	5%	1/10W
JR154	1-216-864-11	METAL CHIP	0	5%	1/10W
JR155	1-216-864-11	METAL CHIP	0	5%	1/10W
		< COIL >			
L151	1-422-009-13	COIL, AIR-CORE			
L251	1-422-009-13	COIL, AIR-CORE			
		< TRANSISTOR >			
Q151	8-729-920-31	TRANSISTOR	DTC343TK		
Q152	8-729-140-84	TRANSISTOR	2SC1841-PAFAEA		
Q153	8-729-920-31	TRANSISTOR	DTC343TK		
Q251	8-729-920-31	TRANSISTOR	DTC343TK		
Q252	8-729-140-84	TRANSISTOR	2SC1841-PAFAEA		
Q253	8-729-920-31	TRANSISTOR	DTC343TK		
Q351	8-729-202-56	TRANSISTOR	2SA950-Y		
Q352	8-729-036-89	TRANSISTOR	KTC3198GR-A		
Q353	8-729-140-84	TRANSISTOR	2SC1841-PAFAEA		
Q354	8-729-037-02	TRANSISTOR	KTA1266Y-AT		
Q355	8-729-038-67	TRANSISTOR	KRC102S		
Q551	8-729-038-54	TRANSISTOR	KRA102S		
Q552	8-729-038-54	TRANSISTOR	KRA102S		
Q553	8-729-038-67	TRANSISTOR	KRC102S		
Q554	8-729-120-28	TRANSISTOR	2SC1623-L5L6		
Q555	8-729-120-28	TRANSISTOR	2SC1623-L5L6		
Q556	8-729-036-89	TRANSISTOR	KTC3198GR-A		
Q557	8-729-036-89	TRANSISTOR	KTC3198GR-A		
Q558	8-729-037-02	TRANSISTOR	KTA1266Y-AT		
Q559	8-729-120-28	TRANSISTOR	2SC1623-L5L6		
Q560	8-729-120-28	TRANSISTOR	2SC1623-L5L6		
Q561	8-729-120-28	TRANSISTOR	2SC1623-L5L6		
Q562	8-729-038-68	TRANSISTOR	KRC103S		
		< RESISTOR >			
R151	1-216-820-11	METAL CHIP	820	5%	1/10W
R152	1-216-820-11	METAL CHIP	820	5%	1/10W
R153	1-216-841-11	METAL CHIP	47K	5%	1/10W
R154	1-216-816-11	METAL CHIP	390	5%	1/10W
R155	1-216-845-11	METAL CHIP	100K	5%	1/10W
R156	1-216-841-11	METAL CHIP	47K	5%	1/10W
R157	1-245-520-11	RES, CEMENT	0.22		
R158	1-245-520-11	RES, CEMENT	0.22		
R159	1-215-857-11	METAL OXIDE	10	5%	1W
R161	1-215-892-11	METAL OXIDE	1K	5%	2W
R162	1-216-837-11	METAL CHIP	22K	5%	1/10W
R163	1-216-843-11	METAL CHIP	68K	5%	1/10W
R164	1-216-837-11	METAL CHIP	22K	5%	1/10W
R165	1-215-857-11	METAL OXIDE	10	5%	1W
R166	1-215-867-00	METAL OXIDE	470	5%	1W
R167	1-249-401-11	CARBON	47	5%	1/4W F
R168	1-216-821-11	METAL CHIP	1K	5%	1/10W
R169	1-216-845-11	METAL CHIP	100K	5%	1/10W
R170	1-216-837-11	METAL CHIP	22K	5%	1/10W
⚠R171	1-217-637-00	FUSIBLE	1	5%	1/4W
R172	1-216-839-11	METAL CHIP	33K	5%	1/10W

Ref. No.	Part No.	Description			Remarks
R251	1-216-820-11	METAL CHIP	820	5%	1/10W
R252	1-216-820-11	METAL CHIP	820	5%	1/10W
R253	1-216-841-11	METAL CHIP	47K	5%	1/10W
R254	1-216-816-11	METAL CHIP	390	5%	1/10W
R255	1-216-845-11	METAL CHIP	100K	5%	1/10W
R256	1-216-841-11	METAL CHIP	47K	5%	1/10W
R257	1-245-520-11	RES, CEMENT	0.22		
R258	1-245-520-11	RES, CEMENT	0.22		
R259	1-215-857-11	METAL OXIDE	10	5%	1W
R261	1-215-892-11	METAL OXIDE	1K	5%	2W
R262	1-216-837-11	METAL CHIP	22K	5%	1/10W
R263	1-216-841-11	METAL CHIP	47K	5%	1/10W
R264	1-216-837-11	METAL CHIP	22K	5%	1/10W
R265	1-215-857-11	METAL OXIDE	10	5%	1W
R266	1-215-867-00	METAL OXIDE	470	5%	1W
R267	1-249-401-11	CARBON	47	5%	1/4W F
R268	1-216-821-11	METAL CHIP	1K	5%	1/10W
R269	1-216-845-11	METAL CHIP	100K	5%	1/10W
R270	1-216-837-11	METAL CHIP	22K	5%	1/10W
R351	1-216-821-11	METAL CHIP	1K	5%	1/10W
R352	1-215-890-11	METAL OXIDE	470	5%	2W
R353	1-216-839-11	METAL CHIP	33K	5%	1/10W
R354	1-216-839-11	METAL CHIP	33K	5%	1/10W
R355	1-216-843-11	METAL CHIP	68K	5%	1/10W
R356	1-216-839-11	METAL CHIP	33K	5%	1/10W
R357	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R358	1-216-837-11	METAL CHIP	22K	5%	1/10W
R360	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R361	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R362	1-215-888-00	METAL OXIDE	220	5%	2W
R537	1-216-845-11	METAL CHIP	100K	5%	1/10W
R551	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R552	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R553	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R554	1-216-845-11	METAL CHIP	100K	5%	1/10W
R555	1-216-845-11	METAL CHIP	100K	5%	1/10W
R556	1-216-845-11	METAL CHIP	100K	5%	1/10W
R557	1-216-845-11	METAL CHIP	100K	5%	1/10W
R558	1-215-870-11	METAL OXIDE	1.5K	5%	1W
R559	1-215-870-11	METAL OXIDE	1.5K	5%	1W
R560	1-216-833-11	METAL CHIP	10K	5%	1/10W
R561	1-216-833-11	METAL CHIP	10K	5%	1/10W
R562	1-216-844-11	METAL CHIP	82K	5%	1/10W
R564	1-216-821-11	METAL CHIP	1K	5%	1/10W
R565	1-216-845-11	METAL CHIP	100K	5%	1/10W
R566	1-216-841-11	METAL CHIP	47K	5%	1/10W
R567	1-216-833-11	METAL CHIP	10K	5%	1/10W
R568	1-216-833-11	METAL CHIP	10K	5%	1/10W
R569	1-216-843-11	METAL CHIP	68K	5%	1/10W
R570	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
		< RELAY >			
RY501	1-515-920-11	RELAY (24V)			
		< THERMISTOR >			
TH501	1-807-796-11	THERMISTOR			

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The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

Ref. No.	Part No.	Description			Remarks
	A-4734-813-A	CD BOARD, COMPLETE			
		**********			
		< CAPACITOR >			
C101	1-164-315-11	CERAMIC CHIP	470PF	5%	50V
C102	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C103	1-164-315-11	CERAMIC CHIP	470PF	5%	50V
C104	1-162-967-11	CERAMIC CHIP	0.0033uF	10%	50V
C105	1-126-927-11	ELECT	2200uF	20%	10V
C107	1-162-919-11	CERAMIC CHIP	22PF	5%	50V
C108	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C109	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C110	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C111	1-126-607-11	ELECT CHIP	47uF	20%	4V
C113	1-128-995-21	ELECT CHIP	100uF	20%	10V
C114	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C115	1-128-995-21	ELECT CHIP	100uF	20%	10V
C116	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C117	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C118	1-115-156-11	CERAMIC CHIP	1uF		10V
C119	1-115-156-11	CERAMIC CHIP	1uF		10V
C120	1-126-607-11	ELECT CHIP	47uF	20%	4V
C131	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C132	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C133	1-125-837-91	CERAMIC CHIP	1uF	10%	6.3V
C150	1-128-995-21	ELECT CHIP	100uF	20%	10V
C151	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C152	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C158	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C201	1-126-246-11	ELECT CHIP	220uF	20%	4V
C202	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C203	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C205	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C206	1-126-607-11	ELECT CHIP	47uF	20%	4V
C207	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C208	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C209	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C211	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C212	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C213	1-162-967-11	CERAMIC CHIP	0.0033uF	10%	50V
C215	1-117-863-11	CERAMIC CHIP	0.47uF	10%	6.3V
C216	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C222	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C223	1-126-607-11	ELECT CHIP	47uF	20%	4V
C224	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C226	1-126-607-11	ELECT CHIP	47uF	20%	4V
C227	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C229	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C230	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C231	1-104-656-11	ELECT CHIP	2200uF	20%	6.3V
C249	1-162-974-11	CERAMIC CHIP	0.01uF		50V
C250	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C251	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C252	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C253	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C254	1-162-918-11	CERAMIC CHIP	18PF	5%	50V
C255	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C256	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C257	1-165-112-11	CERAMIC CHIP	0.33uF		16V
C258	1-162-918-11	CERAMIC CHIP	18PF	5%	50V
C259	1-164-361-11	CERAMIC CHIP	0.047uF		16V
C260	1-126-246-11	ELECT CHIP	220uF	20%	4V
C261	1-126-916-11	ELECT	1000uF	20%	6.3V
C262	1-126-916-11	ELECT	1000uF	20%	6.3V
C263	1-125-822-11	TANTAL. CHIP	10uF	20%	10V
C264	1-126-607-11	ELECT CHIP	47uF	20%	4V
C265	1-126-607-11	ELECT CHIP	47uF	20%	4V
C266	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C267	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C268	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C269	1-125-822-11	TANTAL. CHIP	10uF	20%	10V
C270	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C271	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C273	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C274	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C275	1-125-822-11	TANTAL. CHIP	10uF	20%	10V
C276	1-125-822-11	TANTAL. CHIP	10uF	20%	10V
C292	1-115-156-11	CERAMIC CHIP	1uF		10V
C293	1-126-607-11	ELECT CHIP	47uF	20%	4V
C294	1-126-916-11	ELECT	1000uF	20%	6.3V
		< DIODE >			
D201	8-719-210-39	DIODE EC10QS04-TE12L5			
D202	8-719-210-33	DIODE EC10DSTE12L			
		< CONNECTOR >			
CN101	1-778-957-11	CONNECTOR, FFC/FPC 29P			
CN102	1-794-424-11	CONNECTOR, FCC/FPC 16P			
		< FERRITE BEAD >			
FB101	1-500-283-11	FERRITE	0uH		
FB102	1-500-283-11	FERRITE	0uH		
FB103	1-500-283-11	FERRITE	0uH		
FB104	1-500-283-11	FERRITE	0uH		
FB105	1-500-283-11	FERRITE	0uH		
FB106	1-500-283-11	FERRITE	0uH		
FB107	1-500-283-11	FERRITE	0uH		
FB108	1-500-283-11	FERRITE	0uH		
FB291	1-500-283-11	FERRITE	0uH		
FB292	1-500-283-11	FERRITE	0uH		
		< IC >			
IC101	8-752-408-73	IC CXD3068Q			
IC103	8-752-089-74	IC CXA2581N-T4			
IC104	6-701-810-01	IC TC94A20F-CX4			
IC121	6-701-808-01	IC BA33C25FP-E2			
IC150	8-759-677-90	IC BA5947FP-E2			
		< TRANSISTOR >			
Q101	8-729-049-31	TRANSISTOR 2SB710A-RTX			
		< RESISTOR >			
R101	1-216-864-11	METAL CHIP	0	5%	1/10W
R102	1-216-833-11	METAL CHIP	10K	5%	1/10W
R103	1-216-845-11	METAL CHIP	100K	5%	1/10W
R104	1-216-833-11	METAL CHIP	10K	5%	1/10W
R105	1-216-821-11	METAL CHIP	1K	5%	1/10W
R111	1-216-846-11	METAL CHIP	120K	5%	1/10W
R113	1-216-828-11	METAL CHIP	3.9K	5%	1/10W
R114	1-218-745-11	METAL CHIP	160K	5%	1/10W
R117	1-216-839-11	METAL CHIP	33K	5%	1/10W
R118	1-216-833-11	METAL CHIP	10K	5%	1/10W

CD

CD LED

D-SENSOR (IN)

Ref. No.	Part No.	Description			Remarks
R120	1-216-846-11	METAL CHIP	120K	5%	1/10W
R122	1-216-845-11	METAL CHIP	100K	5%	1/10W
R123	1-216-797-11	METAL CHIP	10	5%	1/10W
R124	1-216-797-11	METAL CHIP	10	5%	1/10W
R125	1-216-834-11	METAL CHIP	12K	5%	1/10W
R126	1-216-834-11	METAL CHIP	12K	5%	1/10W
R131	1-216-839-11	METAL CHIP	33K	5%	1/10W
R132	1-216-849-11	METAL CHIP	220K	5%	1/10W
R133	1-216-819-11	METAL CHIP	680	5%	1/10W
R151	1-216-833-11	METAL CHIP	10K	5%	1/10W
R152	1-216-849-11	METAL CHIP	220K	5%	1/10W
R153	1-216-864-11	METAL CHIP	0	5%	1/10W
R155	1-216-864-11	METAL CHIP	0	5%	1/10W
R156	1-216-864-11	METAL CHIP	0	5%	1/10W
R201	1-216-839-11	METAL CHIP	33K	5%	1/10W
R202	1-216-833-11	METAL CHIP	10K	5%	1/10W
R203	1-216-845-11	METAL CHIP	100K	5%	1/10W
R204	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R205	1-216-821-11	METAL CHIP	1K	5%	1/10W
R206	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R207	1-216-857-11	METAL CHIP	1M	5%	1/10W
R212	1-216-817-11	METAL CHIP	470	5%	1/10W
R213	1-216-817-11	METAL CHIP	470	5%	1/10W
R214	1-216-864-11	METAL CHIP	0	5%	1/10W
R215	1-216-864-11	METAL CHIP	0	5%	1/10W
R216	1-216-857-11	METAL CHIP	1M	5%	1/10W
R218	1-216-821-11	METAL CHIP	1K	5%	1/10W
R219	1-216-821-11	METAL CHIP	1K	5%	1/10W
R220	1-216-821-11	METAL CHIP	1K	5%	1/10W
R230	1-216-813-11	METAL CHIP	220	5%	1/10W
R231	1-216-821-11	METAL CHIP	1K	5%	1/10W
R232	1-216-821-11	METAL CHIP	1K	5%	1/10W
R233	1-216-821-11	METAL CHIP	1K	5%	1/10W
R249	1-216-817-11	METAL CHIP	470	5%	1/10W
R250	1-216-813-11	METAL CHIP	220	5%	1/10W
R251	1-216-813-11	METAL CHIP	220	5%	1/10W
R252	1-216-857-11	METAL CHIP	1M	5%	1/10W
R253	1-216-821-11	METAL CHIP	1K	5%	1/10W
R254	1-216-845-11	METAL CHIP	100K	5%	1/10W
R255	1-216-809-11	METAL CHIP	100	5%	1/10W
R257	1-216-809-11	METAL CHIP	100	5%	1/10W
R259	1-216-809-11	METAL CHIP	100	5%	1/10W
R260	1-216-821-11	METAL CHIP	1K	5%	1/10W
R265	1-216-813-11	METAL CHIP	220	5%	1/10W
R266	1-216-813-11	METAL CHIP	220	5%	1/10W
R271	1-216-833-11	METAL CHIP	10K	5%	1/10W
R272	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R275	1-216-833-11	METAL CHIP	10K	5%	1/10W
R276	1-216-809-11	METAL CHIP	100	5%	1/10W
R279	1-216-809-11	METAL CHIP	100	5%	1/10W
R280	1-216-809-11	METAL CHIP	100	5%	1/10W
R293	1-216-821-11	METAL CHIP	1K	5%	1/10W
		< SWITCH >			
S101	1-572-085-11	SWITCH, LEAF (LIMIT IN)			
		< VIBRETOR >			
X201	1-795-154-21	VIBRETOR, CRYSTAL (16.9344MHz)			

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D-SENSOR (OUT)

DISPLAY

Ref. No.	Part No.	Description			Remarks
		CD LED BOARD			
		**********			
		< CONNECTOR >			
CN705	1-564-718-11	PIN, CONNECTOR (SMALL TYPE) 2P			
		< DIODE >			
D742	8-719-058-64	DIODE SEL5823A-TP15 (DISC ILLUMINATION)			
D743	8-719-058-03	DIODE SEL5423E-TP15 (DISC ILLUMINATION)			
		< RESISTOR >			
R742	1-216-809-11	METAL CHIP	100	5%	1/10W

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		D-SENSOR (IN) BOARD			
		**********			
*	4-976-474-01	HOLDER (P-T)			
		< TRANSISTOR >			
Q841	8-729-921-53	PHOTO TRANSISTOR PT483F1 (DISC IN DETECT)			

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		D-SENSOR (OUT) BOARD			
		**********			
*	4-976-473-01	HOLDER (LED-S)			
		< DIODE >			
D841	8-719-055-84	DIODE GL528VS1 (DISC IN DETECT)			
		< RESISTOR >			
R841	1-216-819-11	METAL CHIP	680	5%	1/10W

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	A-4732-487-A	DISPLAY BOARD, COMPLETE			
		**********			
	4-238-230-01	HOLDER FL			
	4-238-846-01	SHEET FL (GS1)			
		< CAPASITOR >			
C701	1-126-935-11	ELECT	470uF	20%	10V
C702	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C703	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C704	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C705	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C706	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C707	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C708	1-126-160-11	ELECT	1uF	20%	50V
C709	1-126-160-11	ELECT	1uF	20%	50V
C710	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C711	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C712	1-124-234-00	ELECT	22uF	20%	16V
C714	1-124-261-00	ELECT	10uF	20%	50V
C715	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
		< CONNECTOR >			
CN713	1-564-722-11	PIN, CONNECTOR (SMALL TYPE) 6P			
CN714	1-784-735-11	CONNECTOR, FFC 13P			

Ref. No.	Part No.	Description			Remarks
CN716	1-784-733-11	CONNECTOR, FFC 11P			
CN721	1-784-727-11	CONNECTOR, FFC 5P			
		< DIODE >			
D701	8-719-063-79	DIODE 1N4002B			
D702	8-719-063-79	DIODE 1N4002B			
		< FERRITE BEAD >			
FB701	1-469-144-21	FERRITE	0uH		
FB702	1-469-144-21	FERRITE	0uH		
FB703	1-469-144-21	FERRITE	0uH		
FB704	1-469-144-21	FERRITE	0uH		
		< FLUORESCENT INDICATOR TUBE >			
FL701	1-518-881-11	INDICATOR TUBE, FLUORESCENT			
		< IC >			
IC701	6-802-613-01	IC MB90M407APF-G-126-BND			
IC702	8-759-826-34	IC NJL74H400A			
		< JUMPER RESISTOR >			
JR705	1-216-864-11	METAL CHIP	0	5%	1/10W
JR713	1-216-864-11	METAL CHIP	0	5%	1/10W
JR714	1-216-864-11	METAL CHIP	0	5%	1/10W
JR715	1-216-864-11	METAL CHIP	0	5%	1/10W
JR716	1-216-864-11	METAL CHIP	0	5%	1/10W
JR717	1-216-864-11	METAL CHIP	0	5%	1/10W
JR718	1-216-864-11	METAL CHIP	0	5%	1/10W
JR719	1-216-864-11	METAL CHIP	0	5%	1/10W
JR720	1-216-864-11	METAL CHIP	0	5%	1/10W
JR721	1-216-864-11	METAL CHIP	0	5%	1/10W
JR722	1-216-864-11	METAL CHIP	0	5%	1/10W
JR723	1-216-864-11	METAL CHIP	0	5%	1/10W
		< TRANSISTOR >			
Q701	8-729-038-67	TRANSISTOR KRC102S			
Q723	8-729-120-28	TRANSISTOR 2SC1623-L5L6			
Q724	8-729-120-28	TRANSISTOR 2SC1623-L5L6			
Q725	8-729-120-28	TRANSISTOR 2SC1623-L5L6			
Q726	8-729-120-28	TRANSISTOR 2SC1623-L5L6			
		< RESISTOR >			
R701	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R702	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R703	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R704	1-216-845-11	METAL CHIP	100K	5%	1/10W
R705	1-216-833-11	METAL CHIP	10K	5%	1/10W
R706	1-216-833-11	METAL CHIP	10K	5%	1/10W
R707	1-216-833-11	METAL CHIP	10K	5%	1/10W
R708	1-216-845-11	METAL CHIP	100K	5%	1/10W
R709	1-216-845-11	METAL CHIP	100K	5%	1/10W
R710	1-216-845-11	METAL CHIP	100K	5%	1/10W
R711	1-216-845-11	METAL CHIP	100K	5%	1/10W
R712	1-216-845-11	METAL CHIP	100K	5%	1/10W
R713	1-216-845-11	METAL CHIP	100K	5%	1/10W
R720	1-216-805-11	METAL CHIP	47	5%	1/10W
R739	1-216-833-11	METAL CHIP	10K	5%	1/10W
R740	1-216-845-11	METAL CHIP	100K	5%	1/10W
R743	1-216-833-11	METAL CHIP	10K	5%	1/10W
R744	1-216-845-11	METAL CHIP	100K	5%	1/10W
R745	1-216-833-11	METAL CHIP	10K	5%	1/10W
R746	1-216-845-11	METAL CHIP	100K	5%	1/10W
R747	1-216-833-11	METAL CHIP	10K	5%	1/10W
R748	1-216-845-11	METAL CHIP	100K	5%	1/10W
		< VIBRATOR >			
X701	1-781-282-11	VIBRATOR, CERAMIC (4.0MHz)			

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GAME BOARD

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		< CAPACITOR >			
C713	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
		< JACK >			
J701	1-815-646-11	JACK, PIN 3P (GAME INPUT)			
		< RESISTOR >			
R791	1-216-845-11	METAL CHIP	100K	5%	1/10W
R792	1-216-845-11	METAL CHIP	100K	5%	1/10W
R794	1-218-285-11	METAL CHIP	75	5%	1/10W

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H/P BOARD

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		< CAPACITOR >			
C881	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
		< FERRITE BEAD >			
FB801	1-469-144-21	FERRITE	0uH		
FB802	1-469-144-21	FERRITE	0uH		
FB803	1-469-144-21	FERRITE	0uH		
FB804	1-469-144-21	FERRITE	0uH		
		< JACK >			
J881	1-815-575-11	CONNECTOR, DIN 6P (KEY-BOARD INPUT)			
J882	1-815-629-11	JACK (PHONES)			
		< COIL >			
L881	1-410-517-11	INDUCTOR	47uH		

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	A-4732-480-A	KEY BOARD, COMPLETE			

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		< CONNECTOR >			
CN709	1-784-767-11	CONNECTOR, FFC 6P			
CN715	1-784-774-11	CONNECTOR, FFC 13P			
		< DIODE >			
D751	8-719-060-44	DIODE SLR-342VRT32 (ILLUMINATION)			
D752	8-719-060-44	DIODE SLR-342VRT32 (ILLUMINATION)			
D753	8-719-060-44	DIODE SLR-342VRT32 (ILLUMINATION)			
D755	8-719-060-44	DIODE SLR-342VRT32 (ILLUMINATION)			
D757	8-719-060-44	DIODE SLR-342VRT32 (ILLUMINATION)			
D758	8-719-060-44	DIODE SLR-342VRT32 (**I**/⏻)			

KEY **KEY(2)** **LOAD SW** **MAIN**

Ref. No.	Part No.	Description			Remarks
D759	8-719-060-44	DIODE SLR-342VRT32 (ILLUMINATION)			
D760	8-719-060-44	DIODE SLR-342VRT32 (ILLUMINATION)			
D761	8-719-060-44	DIODE SLR-342VRT32 (ILLUMINATION)			
		< JUMPER RESISTOR >			
JR772	1-216-864-11	METAL CHIP	0	5% 1/10W	
		< TRANSISTOR >			
Q759	8-729-038-67	TRANSISTOR KRC102S			
Q770	8-729-038-67	TRANSISTOR KRC102S			
		< RESISTOR >			
R716	1-216-845-11	METAL CHIP	100K	5% 1/10W	
R717	1-216-845-11	METAL CHIP	100K	5% 1/10W	
R718	1-216-845-11	METAL CHIP	100K	5% 1/10W	
R719	1-216-845-11	METAL CHIP	100K	5% 1/10W	
R750	1-216-817-11	METAL CHIP	470	5% 1/10W	
R751	1-216-813-11	METAL CHIP	220	5% 1/10W	
R752	1-216-815-11	METAL CHIP	330	5% 1/10W	
R753	1-216-817-11	METAL CHIP	470	5% 1/10W	
R754	1-216-819-11	METAL CHIP	680	5% 1/10W	
R760	1-216-813-11	METAL CHIP	220	5% 1/10W	
R761	1-216-815-11	METAL CHIP	330	5% 1/10W	
R762	1-216-817-11	METAL CHIP	470	5% 1/10W	
R763	1-216-819-11	METAL CHIP	680	5% 1/10W	
R764	1-216-821-11	METAL CHIP	1K	5% 1/10W	
R765	1-216-823-11	METAL CHIP	1.5K	5% 1/10W	
R766	1-216-825-11	METAL CHIP	2.2K	5% 1/10W	
R767	1-216-829-11	METAL CHIP	4.7K	5% 1/10W	
R768	1-216-833-11	METAL CHIP	10K	5% 1/10W	
R769	1-216-813-11	METAL CHIP	220	5% 1/10W	
R770	1-216-815-11	METAL CHIP	330	5% 1/10W	
R771	1-216-817-11	METAL CHIP	470	5% 1/10W	
R772	1-216-819-11	METAL CHIP	680	5% 1/10W	
R773	1-216-821-11	METAL CHIP	1K	5% 1/10W	
R774	1-216-823-11	METAL CHIP	1.5K	5% 1/10W	
R775	1-216-825-11	METAL CHIP	2.2K	5% 1/10W	
R782	1-216-817-11	METAL CHIP	470	5% 1/10W	
R784	1-216-821-11	METAL CHIP	1K	5% 1/10W	
R785	1-216-829-11	METAL CHIP	4.7K	5% 1/10W	
R787	1-216-839-11	METAL CHIP	33K	5% 1/10W	
R788	1-216-817-11	METAL CHIP	470	5% 1/10W	
R789	1-216-817-11	METAL CHIP	470	5% 1/10W	
R790	1-216-817-11	METAL CHIP	470	5% 1/10W	
R793	1-216-817-11	METAL CHIP	470	5% 1/10W	
R795	1-216-817-11	METAL CHIP	470	5% 1/10W	
R796	1-216-817-11	METAL CHIP	470	5% 1/10W	
		< VARIABLE RESISTOR >			
RV751	1-477-802-11	ENCODER, ROTARY (VOLUME)			
RV752	1-476-980-11	ENCODER (DISC SELECT)			
		< SWITCH >			
S751	1-786-348-21	SWITCH, KEY BOARD (ILLUMINATION)			
S752	1-786-348-21	SWITCH, KEY BOARD (TUNER/BAND)			
S753	1-786-348-21	SWITCH, KEY BOARD (PLAY MODE/ DIRECTION)			
S754	1-786-348-21	SWITCH, KEY BOARD (FM MODE/REPEAT)			
S760	1-786-348-21	SWITCH, KEY BOARD (▮▮)			
S761	1-786-348-21	SWITCH, KEY BOARD (■)			
S762	1-786-348-21	SWITCH, KEY BOARD (REC PAUSE/START)			
S763	1-786-348-21	SWITCH, KEY BOARD (▶▶▮)			
S764	1-786-348-21	SWITCH, KEY BOARD (▶▶)			
S765	1-786-348-21	SWITCH, KEY BOARD (◀▶)			
S766	1-786-348-21	SWITCH, KEY BOARD (◀◀)			
S767	1-786-348-21	SWITCH, KEY BOARD (▮◀◀)			
S768	1-786-348-21	SWITCH, KEY BOARD (ALBM -)			
S769	1-786-348-21	SWITCH, KEY BOARD (ALBM +)			
S770	1-786-348-21	SWITCH, KEY BOARD (CD)			
S772	1-786-348-21	SWITCH, KEY BOARD (TAPE)			
S773	1-786-348-21	SWITCH, KEY BOARD (VIDEO(MD))			
S774	1-786-348-21	SWITCH, KEY BOARD (MENU)			
S775	1-786-348-21	SWITCH, KEY BOARD (ENTER)			
S776	1-786-348-21	SWITCH, KEY BOARD (CLEAR)			
S777	1-786-348-21	SWITCH, KEY BOARD (GAME)			
S778	1-786-348-21	SWITCH, KEY BOARD (I/⏻)			
SS79	1-786-348-21	SWITCH, KEY BOARD (DISPLAY)			
**********					
		KEY (2) BOARD			
		**********			
		< CONNECTOR >			
CN706	1-564-718-11	PIN, CONNECTOR (SMALL TYPE) 2P			
		< RESISTOR >			
R755	1-216-821-11	METAL CHIP	1K	5% 1/10W	
R756	1-216-823-11	METAL CHIP	1.5K	5% 1/10W	
		< SWITCH >			
S755	1-786-348-21	SWITCH, KEY BOARD (CD SYNC)			
S756	1-786-348-21	SWITCH, KEY BOARD (GAME MIXING)			
**********					
		LOAD SW BOARD			
		**********			
		< SWITCH >			
S842	1-786-154-11	SWITCH, ROTARY (LOAD IN/OUT)			
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	A-4732-592-A	MAIN BOARD, COMPLETE			
		**********			
	4-244-594-01	GEAR,DISC			
	7-685-646-79	SCREW +BVTP 3X8 TYPE2 N-S			
		< CAPACITOR >			
C101	1-126-964-11	ELECT	10uF	20% 50V	
C102	1-126-964-11	ELECT	10uF	20% 50V	
C103	1-126-964-11	ELECT	10uF	20% 50V	
C104	1-126-964-11	ELECT	10uF	20% 50V	
C105	1-126-964-11	ELECT	10uF	20% 50V	
C106	1-126-964-11	ELECT	10uF	20% 50V	
C107	1-164-227-11	CERAMIC CHIP	0.022uF	10% 25V	
C108	1-164-227-11	CERAMIC CHIP	0.022uF	10% 25V	
C109	1-126-964-11	ELECT	10uF	20% 50V	
C110	1-136-165-00	FILM	0.1uF	5% 50V	
C111	1-130-469-00	MYLAR	680PF	5% 50V	
C112	1-126-964-11	ELECT	10uF	20% 50V	

Ref. No.	Part No.	Description			Remarks
C113	1-136-165-00	FILM	0.1uF	5%	50V
C114	1-136-165-00	FILM	0.1uF	5%	50V
C121	1-126-963-11	ELECT	4.7uF	20%	50V
C122	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C125	1-126-964-11	ELECT	10uF	20%	50V
C201	1-126-964-11	ELECT	10uF	20%	50V
C202	1-126-964-11	ELECT	10uF	20%	50V
C203	1-126-964-11	ELECT	10uF	20%	50V
C204	1-126-964-11	ELECT	10uF	20%	50V
C205	1-126-964-11	ELECT	10uF	20%	50V
C206	1-126-964-11	ELECT	10uF	20%	50V
C207	1-164-227-11	CERAMIC CHIP	0.022uF	10%	25V
C208	1-164-227-11	CERAMIC CHIP	0.022uF	10%	25V
C209	1-126-964-11	ELECT	10uF	20%	50V
C210	1-136-165-00	FILM	0.1uF	5%	50V
C211	1-130-469-00	MYLAR	680PF	5%	50V
C212	1-126-964-11	ELECT	10uF	20%	50V
C213	1-136-165-00	FILM	0.1uF	5%	50V
C214	1-136-165-00	FILM	0.1uF	5%	50V
C221	1-126-963-11	ELECT	4.7uF	20%	50V
C222	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C225	1-126-964-11	ELECT	10uF	20%	50V
C301	1-162-961-11	CERAMIC CHIP	330PF	10%	50V
C302	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C303	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C304	1-126-959-11	ELECT	0.47uF	20%	50V
C305	1-136-161-00	FILM	0.047uF	5%	50V
C307	1-126-933-11	ELECT	100uF	20%	16V
C308	1-126-964-11	ELECT	10uF	20%	50V
C309	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C310	1-126-935-11	ELECT	470uF	20%	10V
C311	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C312	1-126-947-11	ELECT	47uF	20%	10V
C313	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C315	1-104-665-11	ELECT	100uF	20%	10V
C316	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C317	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C318	1-164-159-21	CERAMIC	0.1uF		50V
C368	1-104-665-11	ELECT	100uF	20%	10V
C369	1-126-960-11	ELECT	1uF	20%	50V
C370	1-126-934-11	ELECT	220uF	20%	10V
C371	1-125-837-91	CERAMIC CHIP	1uF	10%	6.3V
C372	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V
C373	1-125-891-11	CERAMIC CHIP	0.47uF	10%	10V
C374	1-126-964-11	ELECT	10uF	20%	50V
C375	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C377	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C401	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C402	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C403	1-126-933-11	ELECT	100uF	20%	16V
C441	1-164-315-11	CERAMIC CHIP	470PF	5%	50V
C442	1-104-665-11	ELECT	100uF	20%	10V
C443	1-130-483-00	MYLAR	0.01uF	5%	50V
C444	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C445	1-126-960-11	ELECT	1uF	20%	50V
C446	1-126-964-11	ELECT	10uF	20%	50V
C447	1-126-960-11	ELECT	1uF	20%	50V
C448	1-126-964-11	ELECT	10uF	20%	50V
C449	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V

Ref. No.	Part No.	Description			Remarks
C450	1-162-961-11	CERAMIC CHIP	330PF	10%	50V
C461	1-164-315-11	CERAMIC CHIP	470PF	5%	50V
C462	1-104-665-11	ELECT	100uF	20%	10V
C463	1-130-483-00	MYLAR	0.01uF	5%	50V
C464	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C465	1-126-960-11	ELECT	1uF	20%	50V
C466	1-126-964-11	ELECT	10uF	20%	50V
C467	1-126-960-11	ELECT	1uF	20%	50V
C468	1-126-964-11	ELECT	10uF	20%	50V
C469	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C470	1-162-961-11	CERAMIC CHIP	330PF	10%	50V
C481	1-126-964-11	ELECT	10uF	20%	50V
C482	1-126-933-11	ELECT	100uF	20%	16V
C483	1-126-964-11	ELECT	10uF	20%	50V
C484	1-126-964-11	ELECT	10uF	20%	50V
C485	1-126-960-11	ELECT	1uF	20%	50V
C486	1-136-967-11	MYLAR	0.012uF	5%	50V
C487	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V
C488	1-126-947-11	ELECT	47uF	20%	10V
C489	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C490	1-162-969-11	CERAMIC CHIP	0.0068uF	10%	25V
C723	1-126-956-91	ELECT	0.1uF	20%	50V
C724	1-126-956-91	ELECT	0.1uF	20%	50V
C725	1-126-956-91	ELECT	0.1uF	20%	50V
C726	1-126-956-91	ELECT	0.1uF	20%	50V
C727	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V
C728	1-162-969-11	CERAMIC CHIP	0.0068uF	10%	25V
C729	1-110-563-11	CERAMIC CHIP	0.068uF	10%	16V
C730	1-115-467-11	CERAMIC CHIP	0.22uF	10%	10V
C731	1-162-969-11	CERAMIC CHIP	0.0068uF	10%	25V
C732	1-165-176-11	CERAMIC CHIP	0.047uF	10%	16V
C733	1-115-467-11	CERAMIC CHIP	0.22uF	10%	10V
C734	1-125-837-91	CERAMIC CHIP	1uF	10%	6.3V
C736	1-126-956-91	ELECT	0.1uF	20%	50V
C738	1-126-964-11	ELECT	10uF	20%	50V
C801	1-104-656-11	ELECT	2200uF	20%	6.3V
C802	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C803	1-162-917-11	CERAMIC CHIP	15PF	5%	50V
C804	1-162-917-11	CERAMIC CHIP	15PF	5%	50V
C805	1-126-964-11	ELECT	10uF	20%	50V
C806	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C807	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C808	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C809	1-126-916-11	ELECT	1000uF	20%	6.3V
C810	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C811	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C812	1-126-934-11	ELECT	220uF	20%	10V
C813	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C814	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C815	1-126-934-11	ELECT	220uF	20%	10V
C930	1-126-767-11	ELECT	1000uF	20%	16V
C931	1-126-944-11	ELECT	3300uF	20%	25V
C932	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C933	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C934	1-126-927-11	ELECT	2200uF	20%	10V
C935	1-126-935-11	ELECT	470uF	20%	10V
C936	1-126-934-11	ELECT	220uF	20%	16V
C937	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C938	1-126-935-11	ELECT	470uF	20%	16V

MAIN

Ref. No.	Part No.	Description			Remarks
C939	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C941	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C942	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C943	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C953	1-126-964-11	ELECT	10uF	20%	50V
C954	1-126-967-11	ELECT	47uF	20%	50V
C955	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C956	1-165-319-11	CERAMIC CHIP	0.1uF		50V
		< CONNECTOR >			
* CN301	1-564-511-11	PLUG, CONNECTOR 8P			
CN305	1-779-297-11	CONNECTOR,FFC(LIF(NON-ZIF))29P			
* CN306	1-564-706-11	PIN, CONNECTOR (SMALL TYPE) 4P			
* CN307	1-564-711-11	PIN, CONNECTOR (SMALL TYPE) 9P			
* CN308	1-564-709-11	PIN, CONNECTOR (SMALL TYPE) 7P			
CN309	1-691-040-31	CONNECTOR, FFC 8P			
CN310	1-564-707-11	PIN, CONNECTOR (SMALL TYPE) 5P			
CN311	1-568-830-11	CONNECTOR, FFC 11P			
CN314	1-568-830-11	CONNECTOR, FFC 11P			
CN316	1-784-767-11	CONNECTOR, FFC 6P			
* CN441	1-564-710-11	PIN, CONNECTOR (SMALL TYPE) 8P			
CN720	1-784-766-11	CONNECTOR, FFC 5P			
		< DIODE >			
D301	8-719-991-33	DIODE	1SS133T-77		
D302	8-719-991-33	DIODE	1SS133T-77		
D303	8-719-991-33	DIODE	1SS133T-77		
D304	8-719-991-33	DIODE	1SS133T-77		
D306	8-719-991-33	DIODE	1SS133T-77		
D308	8-719-991-33	DIODE	1SS133T-77		
D310	8-719-988-61	DIODE	1SS355TE-17		
D311	8-719-988-61	DIODE	1SS355TE-17		
D714	8-719-988-61	DIODE	1SS355TE-17		
D715	8-719-988-61	DIODE	1SS355TE-17		
D721	8-719-988-61	DIODE	1SS355TE-17		
D722	8-719-988-61	DIODE	1SS355TE-17		
D723	8-719-988-61	DIODE	1SS355TE-17		
D724	8-719-988-61	DIODE	1SS355TE-17		
D725	8-719-988-61	DIODE	1SS355TE-17		
D726	8-719-988-61	DIODE	1SS355TE-17		
D727	8-719-988-61	DIODE	1SS355TE-17		
D728	8-719-988-61	DIODE	1SS355TE-17		
D801	8-719-991-33	DIODE	1SS133T-77		
D802	8-719-991-33	DIODE	1SS133T-77		
D803	8-719-991-33	DIODE	1SS133T-77		
D804	8-719-991-33	DIODE	1SS133T-77		
D806	8-719-063-79	DIODE	1N4002B		
D807	8-719-063-79	DIODE	1N4002B		
D907	8-719-063-79	DIODE	1N4002B		
D931	8-719-063-79	DIODE	1N4002B		
D932	8-719-063-79	DIODE	1N4002B		
D933	8-719-063-79	DIODE	1N4002B		
D934	8-719-063-79	DIODE	1N4002B		
D939	8-719-921-88	DIODE	MTZJ-13B		
D941	8-719-982-19	DIODE	MTZJ-30A		
D942	8-719-109-89	DIODE	RD5.6ESB2		
		< FERRITE BEAD >			
FB301	1-469-144-21	FERRITE	0uH		
FB302	1-469-144-21	FERRITE	0uH		

Ref. No.	Part No.	Description			Remarks
		< IC >			
IC301	6-702-422-11	IC	M61519FPD61G		
IC305	8-759-548-59	IC	SN74LV04ANSR		
IC309	8-749-923-04	IC	TOTX178A (OPTICAL OUT(CD))		
IC401	8-759-356-03	IC	BA6780		
IC481	6-702-130-01	IC	HA12237F		
IC801	6-802-612-01	IC	M30624MGN-A16FP		
IC802	8-759-533-04	IC	M62703ML-E1		
IC803	6-701-760-01	IC	uPC3504AHF		
IC931	8-759-646-52	IC	KIA7805API		
IC932	8-759-646-54	IC	KIA7808API		
IC933	8-759-347-18	IC	KIA7809PI		
		< JACK >			
J301	1-815-577-12	JACK, PIN 2P (VIDEO IN(MD))			
J304	1-815-574-12	JACK, PIN 1P (VIDEO OUT)			
		< JUMPER RESISTOR >			
JR101	1-216-864-11	METAL CHIP	0	5%	1/10W
JR201	1-216-864-11	METAL CHIP	0	5%	1/10W
JR311	1-216-864-11	METAL CHIP	0	5%	1/10W
JR502	1-216-864-11	METAL CHIP	0	5%	1/10W
JR503	1-216-864-11	METAL CHIP	0	5%	1/10W
JR504	1-216-864-11	METAL CHIP	0	5%	1/10W
JR505	1-216-864-11	METAL CHIP	0	5%	1/10W
JR510	1-216-864-11	METAL CHIP	0	5%	1/10W
		< TRANSISTOR >			
Q101	8-729-120-28	TRANSISTOR	2SC1623-L5L6		
Q201	8-729-120-28	TRANSISTOR	2SC1623-L5L6		
Q303	8-729-038-54	TRANSISTOR	KRA102S		
Q304	8-729-036-89	TRANSISTOR	KTC3198GR-A		
Q306	8-729-202-56	TRANSISTOR	2SA950-Y		
Q307	8-729-038-67	TRANSISTOR	KRC102S		
Q308	8-729-038-67	TRANSISTOR	KRC102S		
Q309	8-729-202-56	TRANSISTOR	2SA950-Y		
Q310	8-729-038-67	TRANSISTOR	KRC102S		
Q311	8-729-038-54	TRANSISTOR	KRA102S		
Q312	8-729-038-67	TRANSISTOR	KRC102S		
Q316	8-729-038-67	TRANSISTOR	KRC102S		
Q317	8-729-801-84	TRANSISTOR	2SB1013-4		
Q402	8-729-038-67	TRANSISTOR	KRC102S		
Q404	8-729-038-67	TRANSISTOR	KRC102S		
Q406	8-729-038-67	TRANSISTOR	KRC102S		
Q408	8-729-038-67	TRANSISTOR	KRC102S		
Q441	8-729-036-86	TRANSISTOR	KTC3203Y-AT		
Q442	8-729-036-86	TRANSISTOR	KTC3203Y-AT		
Q461	8-729-036-86	TRANSISTOR	KTC3203Y-AT		
Q462	8-729-036-86	TRANSISTOR	KTC3203Y-AT		
Q481	8-729-036-86	TRANSISTOR	KTC3203Y-AT		
Q482	8-729-037-02	TRANSISTOR	KTA1266Y-AT		
Q483	8-729-038-67	TRANSISTOR	KRC102S		
Q484	8-729-038-54	TRANSISTOR	KRA102S		
Q485	8-729-038-67	TRANSISTOR	KRC102S		
Q801	8-729-120-28	TRANSISTOR	2SC1623-L5L6		
Q802	8-729-049-31	TRANSISTOR	2SB710A-RTX		
Q803	8-729-120-28	TRANSISTOR	2SC1623-L5L6		
Q804	8-729-038-67	TRANSISTOR	KRC102S		

Ref. No.	Part No.	Description			Remarks
Q805	8-729-120-28	TRANSISTOR	2SC1623-L5L6		
Q806	8-729-049-31	TRANSISTOR	2SB710A-RTX		
Q931	8-729-019-00	TRANSISTOR	2SD2394-G		
Q934	8-729-037-13	TRANSISTOR	KTA1271Y		
		< RESISTOR >			
R101	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R102	1-216-835-11	METAL CHIP	15K	5%	1/10W
R103	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R104	1-216-841-11	METAL CHIP	47K	5%	1/10W
R105	1-216-833-11	METAL CHIP	10K	5%	1/10W
R107	1-216-833-11	METAL CHIP	10K	5%	1/10W
R108	1-216-833-11	METAL CHIP	10K	5%	1/10W
R117	1-216-830-11	METAL CHIP	5.6K	5%	1/10W
R118	1-216-821-11	METAL CHIP	1K	5%	1/10W
R119	1-216-841-11	METAL CHIP	47K	5%	1/10W
R120	1-216-839-11	METAL CHIP	33K	5%	1/10W
R121	1-216-833-11	METAL CHIP	10K	5%	1/10W
R123	1-216-833-11	METAL CHIP	10K	5%	1/10W
R201	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R202	1-216-835-11	METAL CHIP	15K	5%	1/10W
R203	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R204	1-216-841-11	METAL CHIP	47K	5%	1/10W
R205	1-216-833-11	METAL CHIP	10K	5%	1/10W
R207	1-216-833-11	METAL CHIP	10K	5%	1/10W
R208	1-216-833-11	METAL CHIP	10K	5%	1/10W
R217	1-216-830-11	METAL CHIP	5.6K	5%	1/10W
R218	1-216-821-11	METAL CHIP	1K	5%	1/10W
R219	1-216-841-11	METAL CHIP	47K	5%	1/10W
R220	1-216-839-11	METAL CHIP	33K	5%	1/10W
R221	1-216-833-11	METAL CHIP	10K	5%	1/10W
R223	1-216-833-11	METAL CHIP	10K	5%	1/10W
R301	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R302	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R303	1-216-857-11	METAL CHIP	1M	5%	1/10W
R304	1-216-845-11	METAL CHIP	100K	5%	1/10W
R305	1-216-833-11	METAL CHIP	10K	5%	1/10W
R309	1-216-833-11	METAL CHIP	10K	5%	1/10W
R310	1-216-837-11	METAL CHIP	22K	5%	1/10W
R311	1-216-841-11	METAL CHIP	47K	5%	1/10W
R312	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R313	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R314	1-216-841-11	METAL CHIP	47K	5%	1/10W
R315	1-216-853-11	METAL CHIP	470K	5%	1/10W
R316	1-216-835-11	METAL CHIP	15K	5%	1/10W
R318	1-216-821-11	METAL CHIP	1K	5%	1/10W
R319	1-216-821-11	METAL CHIP	1K	5%	1/10W
R320	1-216-821-11	METAL CHIP	1K	5%	1/10W
R321	1-216-821-11	METAL CHIP	1K	5%	1/10W
R322	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R323	1-216-845-11	METAL CHIP	100K	5%	1/10W
R324	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R325	1-216-845-11	METAL CHIP	100K	5%	1/10W
R326	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R332	1-216-845-11	METAL CHIP	100K	5%	1/10W
R333	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R334	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R335	1-216-815-11	METAL CHIP	330	5%	1/10W
R338	1-216-813-11	METAL CHIP	220	5%	1/10W
R339	1-216-821-11	METAL CHIP	1K	5%	1/10W

Ref. No.	Part No.	Description			Remarks
R340	1-216-797-11	METAL CHIP	10	5%	1/10W
R341	1-216-833-11	METAL CHIP	10K	5%	1/10W
R342	1-216-833-11	METAL CHIP	10K	5%	1/10W
R351	1-216-833-11	METAL CHIP	10K	5%	1/10W
R352	1-216-833-11	METAL CHIP	10K	5%	1/10W
R356	1-216-821-11	METAL CHIP	1K	5%	1/10W
R401	1-216-845-11	METAL CHIP	100K	5%	1/10W
R402	1-216-845-11	METAL CHIP	100K	5%	1/10W
R403	1-216-864-11	METAL CHIP	0	5%	1/10W
R404	1-249-382-11	CARBON	1.2	5%	1/6W F
R405	1-249-382-11	CARBON	1.2	5%	1/6W F
R406	1-216-833-11	METAL CHIP	10K	5%	1/10W
R407	1-216-833-11	METAL CHIP	10K	5%	1/10W
R408	1-216-833-11	METAL CHIP	10K	5%	1/10W
R409	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R410	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R411	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R412	1-216-839-11	METAL CHIP	33K	5%	1/10W
R413	1-216-839-11	METAL CHIP	33K	5%	1/10W
R414	1-216-839-11	METAL CHIP	33K	5%	1/10W
R415	1-216-833-11	METAL CHIP	10K	5%	1/10W
R416	1-216-833-11	METAL CHIP	10K	5%	1/10W
R417	1-216-833-11	METAL CHIP	10K	5%	1/10W
R418	1-216-833-11	METAL CHIP	10K	5%	1/10W
R441	1-216-839-11	METAL CHIP	33K	5%	1/10W
R442	1-216-834-11	METAL CHIP	12K	5%	1/10W
R443	1-216-833-11	METAL CHIP	10K	5%	1/10W
R444	1-216-823-11	METAL CHIP	1.5K	5%	1/10W
R445	1-216-841-11	METAL CHIP	47K	5%	1/10W
R446	1-216-833-11	METAL CHIP	10K	5%	1/10W
R447	1-216-833-11	METAL CHIP	10K	5%	1/10W
R448	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R451	1-216-833-11	METAL CHIP	10K	5%	1/10W
R452	1-216-833-11	METAL CHIP	10K	5%	1/10W
R453	1-218-867-11	METAL CHIP	6.8K	5%	1/10W
R454	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R461	1-216-839-11	METAL CHIP	33K	5%	1/10W
R462	1-216-834-11	METAL CHIP	12K	5%	1/10W
R463	1-216-833-11	METAL CHIP	10K	5%	1/10W
R464	1-216-823-11	METAL CHIP	1.5K	5%	1/10W
R465	1-216-841-11	METAL CHIP	47K	5%	1/10W
R466	1-216-833-11	METAL CHIP	10K	5%	1/10W
R467	1-216-833-11	METAL CHIP	10K	5%	1/10W
R468	1-216-833-11	METAL CHIP	10K	5%	1/10W
R469	1-218-867-11	METAL CHIP	6.8K	5%	1/10W
R470	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R471	1-216-833-11	METAL CHIP	10K	5%	1/10W
R472	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R481	1-218-725-11	METAL CHIP	24K	5%	1/10W
R482	1-216-857-11	METAL CHIP	1M	5%	1/10W
R483	1-216-841-11	METAL CHIP	47K	5%	1/10W
R484	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R485	1-216-833-11	METAL CHIP	10K	5%	1/10W
R486	1-216-841-11	METAL CHIP	47K	5%	1/10W
R487	1-216-821-11	METAL CHIP	1K	5%	1/10W
R488	1-216-803-11	METAL CHIP	33	5%	1/10W
R489	1-216-821-11	METAL CHIP	1K	5%	1/10W
R490	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R491	1-216-805-11	METAL CHIP	47	5%	1/10W

MAIN POWER

Ref. No.	Part No.	Description			Remarks
R492	1-216-803-11	METAL CHIP	33	5%	1/10W
R493	1-216-833-11	METAL CHIP	10K	5%	1/10W
R494	1-216-797-11	METAL CHIP	10	5%	1/10W
R495	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R496	1-216-841-11	METAL CHIP	47K	5%	1/10W
R497	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R498	1-218-446-11	METAL CHIP	1	5%	1/10W
R723	1-216-849-11	METAL CHIP	220K	5%	1/10W
R724	1-216-849-11	METAL CHIP	220K	5%	1/10W
R725	1-216-849-11	METAL CHIP	220K	5%	1/10W
R726	1-216-849-11	METAL CHIP	220K	5%	1/10W
R727	1-216-841-11	METAL CHIP	47K	5%	1/10W
R728	1-216-841-11	METAL CHIP	47K	5%	1/10W
R729	1-216-841-11	METAL CHIP	47K	5%	1/10W
R730	1-216-841-11	METAL CHIP	47K	5%	1/10W
R731	1-216-821-11	METAL CHIP	1K	5%	1/10W
R732	1-216-821-11	METAL CHIP	1K	5%	1/10W
R733	1-216-821-11	METAL CHIP	1K	5%	1/10W
R734	1-216-821-11	METAL CHIP	1K	5%	1/10W
R735	1-216-853-11	METAL CHIP	470K	5%	1/10W
R736	1-216-821-11	METAL CHIP	1K	5%	1/10W
R737	1-216-851-11	METAL CHIP	330K	5%	1/10W
R801	1-216-833-11	METAL CHIP	10K	5%	1/10W
R802	1-216-833-11	METAL CHIP	10K	5%	1/10W
R803	1-216-809-11	METAL CHIP	100	5%	1/10W
R804	1-216-809-11	METAL CHIP	100	5%	1/10W
R805	1-216-809-11	METAL CHIP	100	5%	1/10W
R806	1-216-809-11	METAL CHIP	100	5%	1/10W
R807	1-216-821-11	METAL CHIP	1K	5%	1/10W
R808	1-216-809-11	METAL CHIP	100	5%	1/10W
R809	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R810	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R811	1-216-809-11	METAL CHIP	100	5%	1/10W
R812	1-216-821-11	METAL CHIP	1K	5%	1/10W
R813	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R814	1-216-849-11	METAL CHIP	220K	5%	1/10W
R815	1-216-809-11	METAL CHIP	100	5%	1/10W
R816	1-216-845-11	METAL CHIP	100K	5%	1/10W
R817	1-216-821-11	METAL CHIP	1K	5%	1/10W
R818	1-216-833-11	METAL CHIP	10K	5%	1/10W
R819	1-216-833-11	METAL CHIP	10K	5%	1/10W
R820	1-216-809-11	METAL CHIP	100	5%	1/10W
R821	1-216-809-11	METAL CHIP	100	5%	1/10W
R822	1-216-809-11	METAL CHIP	100	5%	1/10W
R823	1-216-833-11	METAL CHIP	10K	5%	1/10W
R824	1-216-811-11	METAL CHIP	150	5%	1/10W
R825	1-216-821-11	METAL CHIP	1K	5%	1/10W
R826	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R827	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R828	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R829	1-216-809-11	METAL CHIP	100	5%	1/10W
R830	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R831	1-216-841-11	METAL CHIP	47K	5%	1/10W
R832	1-216-841-11	METAL CHIP	47K	5%	1/10W
R833	1-216-833-11	METAL CHIP	10K	5%	1/10W
R834	1-216-833-11	METAL CHIP	10K	5%	1/10W
R835	1-216-833-11	METAL CHIP	10K	5%	1/10W
R836	1-216-833-11	METAL CHIP	10K	5%	1/10W
R837	1-216-833-11	METAL CHIP	10K	5%	1/10W
R838	1-216-821-11	METAL CHIP	1K	5%	1/10W
R839	1-216-833-11	METAL CHIP	10K	5%	1/10W
R840	1-216-833-11	METAL CHIP	10K	5%	1/10W
R842	1-216-833-11	METAL CHIP	10K	5%	1/10W
R843	1-216-833-11	METAL CHIP	10K	5%	1/10W
R844	1-216-821-11	METAL CHIP	1K	5%	1/10W
R845	1-216-821-11	METAL CHIP	1K	5%	1/10W
R846	1-216-809-11	METAL CHIP	100	5%	1/10W
R847	1-216-809-11	METAL CHIP	100	5%	1/10W
R848	1-216-821-11	METAL CHIP	1K	5%	1/10W
R850	1-216-821-11	METAL CHIP	1K	5%	1/10W
R851	1-216-809-11	METAL CHIP	100	5%	1/10W
R852	1-216-833-11	METAL CHIP	10K	5%	1/10W
R853	1-216-821-11	METAL CHIP	1K	5%	1/10W
R854	1-216-841-11	METAL CHIP	47K	5%	1/10W
R931	1-249-414-11	CARBON	560	5%	1/4W F
R933	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R934	1-216-845-11	METAL CHIP	100K	5%	1/10W
R935	1-216-833-11	METAL CHIP	10K	5%	1/10W
R936	1-216-813-11	METAL CHIP	220	5%	1/10W
R937	1-216-813-11	METAL CHIP	220	5%	1/10W
		< VARIABLE RESISTOR >			
RV401	1-238-600-11	RES, ADJ, CARBON 10K (D-SENS LEVEL)			
		< TRANSFORMER >			
T441	1-419-080-21	COIL			
T461	1-419-080-21	COIL			
T481	1-433-372-31	TRANSFORMER, BIAS OSCILLATION			
		< VIBRATOR >			
X801	1-795-482-11	VIBRATOR, CERAMIC (16MHz)			
X802	1-567-098-41	VIBRATOR, CRYSTAL (32.768kHz)			
**********					
	1-687-602-11	POWER BOARD			
		**********			
		< CAPACITOR >			
C901	1-126-935-11	ELECT	470uF	20%	16V
C902	1-126-968-11	ELECT	100uF	20%	50V
C903	1-115-339-11	CERAMIC CHIP	0.1uF	10%	50V
⚠C904	1-113-925-11	CERAMIC	0.01uF	20%	250V
		< DIODE >			
D901	8-719-063-79	DIODE 1N4002B			
D902	8-719-063-79	DIODE 1N4002B			
D903	8-719-063-79	DIODE 1N4002B			
D904	8-719-063-79	DIODE 1N4002B			
D905	8-719-063-79	DIODE 1N4002B			
D906	8-719-063-79	DIODE 1N4002B			
		< FUSE HOLDER >			
FH903	1-533-233-31	FUSE HOLDER			
FH904	1-533-233-31	FUSE HOLDER			

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Ref. No.	Part No.	Description			Remarks
		< LINE FILTER >			
LF901	1-402-663-11	TRANSFORMER, LINE FILTER (LFT)			
		< TRANSISTOR >			
⚠Q901	8-729-029-72	TRANSISTOR DTC114YSA			
		< RESISTOR >			
R901	1-249-381-11	CARBON	1	5%	1/4W F
⚠R902	1-212-881-11	FUSIBLE	100	5%	1/4W
R903	1-249-399-11	CARBON	33	5%	1/4W F
⚠R904	1-219-237-51	CARBON	3.3M	5%	1/2W
⚠R905	1-219-119-81	FUSIBLE	0.1	5%	1/4W
		< RELAY >			
⚠RY901	1-755-214-11	RELAY, AC POWER			
		< TRANSFORMER >			
⚠T902	1-437-725-11	TRANSFORMER, POWER			
		< TERMINAL >			
TER901	1-535-416-00	TERMINAL			
TER902	1-535-416-00	TERMINAL			
**********					
		SPK BOARD			
		**********			
		< TERMINAL >			
J357	1-694-785-11	TERMINAL BOARD (SPEAKER)			
**********					
		T-SENSOR BOARD			
		**********			
		< IC >			
IC11	8-749-924-18	PHOTO INTERRUPTER RPI-1391			
IC12	8-749-924-18	PHOTO INTERRUPTER RPI-1391			
IC13	8-749-924-18	PHOTO INTERRUPTER RPI-1391			
		< RESISTOR >			
R891	1-216-820-11	METAL CHIP	820	5%	1/10W
R892	1-216-820-11	METAL CHIP	820	5%	1/10W
R893	1-216-820-11	METAL CHIP	820	5%	1/10W
**********					

Ref. No.	Part No.	Description	Remarks
		MISCELLANEOUS	
		**********	
3	1-796-351-41	DECK, MECHANICAL (CMAL1Z234A)	
14	1-590-218-11	WIRE (FLAT TYPE) (11 CORE)	
15	1-824-103-11	WIRE (FLAT TYPE) (8 CORE)	
81	1-696-656-11	WIRE (FLAT TYPE) (13 CORE)	
82	1-765-325-11	WIRE (FLAT TYPE) (11 CORE)	
83	1-769-856-11	WIRE (FLAT TYPE) (5 CORE)	
⚠108	1-757-933-11	CORD, POWER	
⚠602	A-3328-818-A	DEVICE,OPTICAL (KSM-213BFN)	
604	1-782-817-11	WIRE (FLAT TYPE) (16 CORE)	
605	1-824-104-11	WIRE (FLAT TYPE) (29 CORE)	
⚠F902	1-533-454-11	FUSE, GLASS TUBE (DIA. 5)	
M351	1-763-697-21	DC FAN	
M441	A-4735-051-A	MOTOR (60) ASSY (LOADING)	
M442	A-4735-051-A	MOTOR (60) ASSY (TABLE)	
SW701	1-692-960-11	SWITCH, PUSH (1 KEY) (DOOR SW)	
⚠T901	1-439-648-11	TRANSFORMER, POWER	

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REVISION HISTORY

Clicking the version allows you to jump to the revised page.
Also, clicking the version at the upper right on the revised page allows you to jump to the next revised page.

Ver.	Date	Description of Revision
1.0	2003.03	New
1.1	2003.09	Correction of exploded views (Ref. No. 3, 4, 107 and 601). Correction of CD mechanism name and tape mechanism name. Change of CD board. (SPM-03081)
1.2	2003.12	Correction of exploded views (Ref. No. 107 deleted). (SPM-03105)